# MAMMALS COLLECTED BY MR. SHAW MAYER IN NEW GUINEA 1932-1949

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Pp. 269-318

# BULLETIN OF

THE BRITISH MUSEUM (NATURAL HISTORY) ZOOLOGY Vol. 1 No. 10

LONDON : 1952

THE BULLETIN OF THE BRITISH MUSEUM (NATURAL HISTORY), instituted in 1949, is issued in five series, corresponding to the Departments of the Museum.

Parts appear at irregular intervals as they become ready. Volumes will contain about three or four hundred pages, and will not necessarily be completed within one calendar year.

This paper is Vol. 1, No. 10 of the Zoological series.

PRINTED BY ORDER OF THE TRUSTEES OF THE BRITISH MUSEUM

Issued December 1952

Price Fifteen shillings



# MAMMALS COLLECTED BY MR. SHAW MAYER IN NEW GUINEA, 1932–1949

# By eleanor m. o. laurie

# SYNOPSIS

This paper gives a detailed account of a large collection of Mammals, mainly Marsupials and Rodents, from north-east New Guinea and eastern Papua (south-east New Guinea). Comparative descriptions are made of 13 new forms comprising 1 new genus (rodent), 7 new species (3 marsupials, 2 rodents, 1 bat, and 1 monotreme), and 5 subspecies (3 marsupials and 2 rodents).

DURING the years 1932-1949 Mr. Shaw Mayer made a collection of mammals in New Guinea. Most of the specimens came from localities of comparatively high altitude, where the hill-sides are covered with rain forest. Between 5,000 and 8,000 ft. the lower limit of the wet mossy forest is often reached. From 10,000 to 11,000 ft. is a drier zone of grassland and coniferous forest, the upper limit of the forests being at about 14,000 ft. A list of all the localities from which specimens were obtained is given in Appendix II. Most of them are in north-east New Guinea: the Hagen Range and Sepik-Wahgi Divide, 4,500-8,500 ft.; the Kratke Mountains and Upper Waria River district, 2,500-6,000 ft.; the Upper Ramu River Plateau, 6,000 ft.; Mount Wilhelm and Herowagi, Bismarck Range, 6,000-10,000 ft.; the Ramu Purari Divide which is south-east of the Bismarck Range, 7,500-8,000 ft.; and in eastern Papua, south-east New Guinea: Mount Simpson, Mount Mura (30 miles NW. of Mt. Simpson) and the Maneao Range (35 miles NW. of Mt. Simpson), 1,000-7,000 ft. (see Fig. 1). A few specimens, mainly rodents, were also collected from West Fergusson Island (which is about 40 miles from the mainland), between 600 and 3,000 ft. Many of these regions have not been investigated before, particularly those near the Bismarck Range and Mount Simpson.

The collection comprises 370 marsupials belonging to 29 species, 380 rodents belonging to 31 species, 31 bats belonging to 11 species, and 5 monotremes belonging to 3 species.

Among these specimens which are dealt with in this paper are 13 new forms: 6 marsupials (3 species and 3 subspecies), 5 rodents (1 genus, 2 species, and 2 subspecies), 1 bat (species), and 1 monotreme (species).

Most of the recent work on mammals of New Guinea has been done by G. H. H. Tate (1935–1951), using several valuable collections from Vogelkop, the Arfak Mountains, Humboldt Bay, the Weyland Mountains, Mount Wilhelmina, the Indenburg River, Fly River, Oriomo River, the Central Division of Papua, the Huon Peninsula, and from islands off the coast of New Guinea. An account of the rodents of Australia and New Guinea by Tate (1951) has been published while this manuscript was in the press. I have, however, been able to refer to it and in the main have followed his revised nomenclature. Accounts of many of the forms from New Guinea have been given by Thomas and also by Schlegel, Milne-Edwards, Matschie, Ramsay, Rothschild & Dollman, Hinton & Ellerman.

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This account includes references to a few co-types and paratypes which have already been mentioned in their type descriptions but are included here as they are part of this collection.

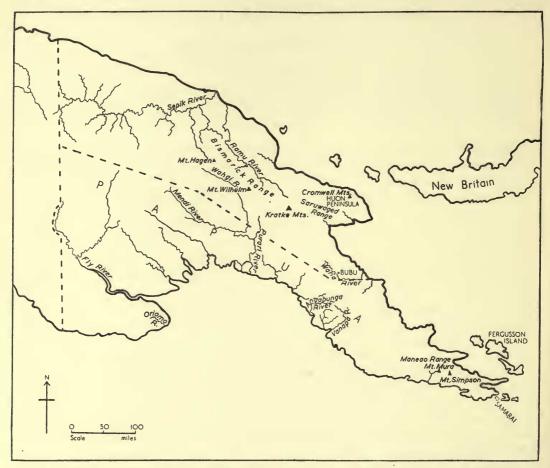


FIG. 1. Map of eastern New Guinea showing localities near which specimens were obtained.

Amongst the commonest animals collected are the following:

MARSUPIALS: Eudromicia caudata, the Long-tailed Dormouse Phalanger; Dactylopsila trivirgata melampus, the Black-footed Striped Phalanger; Dactylonax palpator, the Long-fingered Striped Phalanger; Phalanger vestitus, a Cuscus; Pseudocheirus c. cupreus and P. c. corinnae, Ring-tailed Opossums (only from NE. New Guinea but previously recorded from both NE. and SE.); Peroryctes longicauda ornata, the Ornate Bandicoot (only from NE. New Guinea but previously recorded from both NE. and SE.); and Satanellus albopunctatus, the northern Native Cat which is now regarded as being synonymous with the southern form daemonellus. The Ring-tail Opossum Pseudocheirus forbesi larvatus also appears to be fairly common but is restricted to north-east New Guinea.

RODENTS: Rattus exulans browni, Brown's Island Rat, a small rat common in RODENTS: Rattus exultans browni, Brown's Island Rat, a small rat common in native huts; Rattus ruber tramitius, a common outdoor scavenger in native gardens and sometimes in huts; Melomys rufescens rufescens, a Mosaic-tailed Rat; Pogonomys mollipilosus, Pogonomys sylvestris, and Pogonomys macrourus, Prehensile-tailed Rats; and Mallomys rothschildi, a giant rat. Melomys fellowsi, a Mosaic-tailed Rat, Crossomys moncktoni, Monckton's Water-rat, Hyomys goliath goliath, one of the giant rats, and Parahydromys asper, a water-rat are also common, but in this collection have only been taken from north-east New Guinea though their range, apart from *Melomys fellowsi*, extends into north-east Papua. Only a small number of bats were collected. They include, however, one new

species of Otomops, which is of interest as this is only the second time that the genus has been recorded from New Guinea.

The Echidnas include one new species of Zaglossus.

The fauna of New Guinea is closely related to that of Australia. The great majority of the forms, however, are specific to New Guinea and the neighbouring islands.

Throughout this paper the specimen numbers given are the British Museum registered numbers unless otherwise stated.

Where there are a large number of specimens of a species the extremes, mean, and standard deviation which gives some idea of the variation from the mean, are

given instead of the detailed measurements of each specimen. I should like to take this opportunity of expressing my thanks to my colleagues in the Mammal Room for their help, especially to Dr. T. C. S. Morrison-Scott and to Mr. R. W. Hayman, who helped with the identification of the bats and has described the new Otomops in this paper.

### MONOTREMATA

# Zaglossus bartoni bartoni (Thomas)

Acanthoglossus bruijnii bartoni Thomas, 1907, Ann. Mag. Nat. Hist. 7: 294. Type locality: Mount Victoria, Papua, 8,000 ft.

Two specimens, ?9 50.1453, & 1452, from Bubu River district, NE. New Guinea. Measurements in mm. (taken in the flesh) [Female first, male second]: Total length 600, 573; hind foot—, 62; weight 21<sup>3</sup>/<sub>4</sub> lb., 13 lb.; length of skull 175, 169; basal length 167, 158; breadth of braincase 55, 57; muzzle from level of lacrymal canal 110.3, 106.1; gnathion to back of palatal bones 154, 146; least inter-orbital breadth 20.0, 18.2; width of rostrum 40 mm. from tip 11.8, 11.4.

# Zaglossus bubuensis sp. n.

Type locality: Bubu River district, NE. New Guinea, c. 7,000-8,000 ft.

*Type*: Adult 3 50.1454, collector's No. 544, 8 Nov. 1936. Skin and skull. Similar to *bartoni* in having five claws on all the feet, in the spineless undersurface which, however, is only thinly covered with hair, and in the uniform whiteness of the short (max. length c. 32 mm.) spines. It differs from Z. b. bartoni in that its hair is brown, not black, and does not quite cover the spines on its back. The hair on the backs of all four feet is light brown.

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Body measurements in mm. (taken in the flesh): Total length 656; hind foot 60; weight  $17\frac{1}{2}$ lb.

The size and shape of the skull is somewhat similar to that of Z. b. bartoni, but the rostrum is not so curved.

Skull measurements in mm.:

	Total length	Basal length	Breadth brain case	Muzzle from lacrymal canal	Gnathion to back of palatals	Inter-orbital breadth	Width rostrum 40 mm. from tip
Type of bubuensis	177	167	57 <sup>.</sup> 5	108	156	17·1	12·4
Type of bartoni	184	174	59 <sup>.</sup> 5	115	161	20·0	13·0

## Tachyglossus aculeata lawesi (Ramsay)

Echidna (Tachyglossus) lawesi Ramsay, 1877, Proc. Linn. Soc. N.S.W., 2: 32. Type locality: Port Moresby, SE. New Guinea.

Juvenile 950.1450 (skull and piece of skin), Apimuri, Kratke Mts., NE. New Guinea; skull 950.1451, locality unknown but probably same as 50.1450.

#### MARSUPIALIA

### Thylogale bruijni browni (Ramsay)

Halmaturus brownii Ramsay, 1877, Proc. Linn. Soc. N.S.W. 1: 307. Type locality: New Ireland.

Macropus lugens Alston, 1877, Proc. Zool. Soc. Lond. 1877: 126.

Type locality: Duke of York Island or adjoining shores of New Britain or New Ireland. Macropus tibol Miklouho-Maclay, 1885, Proc. Linn. Soc. N.S.W. 10: 141.

Type locality: 'Maclay Coast' north of Finisterre Range and east of Madang.

Thylogale lauterbachi Matschie, 1916, Mitt. Zool. Mus. Berl. 8: 290-292.

Type locality: Ogeramnag near Source of Bulung River.

Thylogale brunii brownii Ramsay, Tate, 1948, Bull Amer. Mus. Nat. Hist. 91: 319-320.

Five specimens from NE. New Guinea: 350.1445, Arau, Kratke Mts.; juv. 31447, 91446, Buntibasa district, Krakte Mts.; 31449 (skull and piece of skin), Kambaidam, Kratke Mts.; 91448, Bubu River district.

## Dorcopsulus vanheurni vanheurni (Thomas)

Dorcopsis vanheurni Thomas, 1922, Ann. Mag. Nat. Hist. 9: 264. Type locality: Doormanpad-bivak, N. New Guinea, 1410 m. Dorcopsulus vanheurni vanheurni Thomas, Tate, 1948, Bull. Amer. Mus. Nat. Hist. 91: 286-287.

Six specimens. Three from NE. New Guinea: 3 50.1434, Kuraka, Kratke Mts.; 3 1443, 9 1444, Saiko, Bubu River; and three 991140, 1141, juv. 1142, from Boneno, Mt. Mura, eastern Papua.

Two females, Nos. 1140 and 1141, and a male, No. 1434, are of interest as their pelage appears to be that of the fully adult animal, which differs from that of the

### IN NEW GUINEA, 1932-1949

type, a young adult female, in being shorter, thinner, and of darker grizzled brown without the somewhat rufous colour.

Measurements in mm. (taken in the flesh):

Number	Sex	Head and body	Tail	Hind Foot	Ear	Basal length	Zygomatic breadth	Nasals, length	Anterior palatal foramina	$p^4$ - $m^4$	$m^{1-3}$	$p^4$
50.1140 1141 1434 1443 1444	0+0+ %0 %0 0+	446 413 341 395 375	347 320 402 298 295	107 103 100 96 98	40 40 39 37 38	74 <sup>.</sup> 9 70 <sup>.</sup> 5 74 <sup>.0</sup> 69 <sup>.</sup> 1 70 <sup>.0</sup>	46·1 42·7 44·2 43·2 42·7	33·3 32·1 33·0 31·8 31·5	4.0 4.6 5.4 2.5 4.6	27·8 28·0 27·0 26·3 26·9	13.6 13.6 13.5 13.4 13.4	$9.6 \times 3.5 9.6 \times 3.4 9.0 \times 3.5 8.1 \times 3.2 8.5 \times 3.5$

# Dendrolagus dorianus dorianus Ramsay\*

Dendrolagus dorianus Ramsay, 1883, Proc. Linn. Soc. N.S.W. 8: 17.

Type locality: Mount Astrolabe, SE. New Guinea.

Dendrolagus dorianus dorianus Ramsay, Rothschild & Dollman, 1936, Trans. Zool. Soc. Lond. 21: 477-549.

Nine specimens. Seven from NE. New Guinea: 3 50.1427, 1428, 1423, juv. 3 1422, 9 1424, 1426, juv. 9 1425, south side Bubu River, NE. New Guinea; and two from eastern Papua: 9 1143, Enaena, NE. slopes Mt. Simpson; and 9 1144, Manaeo Range.

The colour of the pelage of these specimens varies from a dark brown, e.g. No. 1428, to a light greyish-brown, No. 1143.

Although the tail is non-prehensile the hairs on it in specimens Nos. 1143 and 1144 are worn down so that they are quite short and bristly. The tails of one or two of the specimens of *Dendrolagus* already in the Museum's collection also have this appearance. *Measurements* in mm. (taken in the flesh):

Number	Sex	Head and body	Tail	Hind foot	Ear	Basal length	Zygomatic breadth	Nasals	<u>111-8</u>	Þ4	m <sup>1</sup>	311 <sup>2</sup>	3W <sup>3</sup>	PH4
50.1143 1426 1424 1423 1144	0+ 0+ 0+ *0 0+	596 600 615 628 633	662 490 463 497 550	117 102 100 107 103	48 50 50 57 45	115·8 108·8 106·9 113·2 109·0	72.0 65.8 67.2 75.5 68.8	47.5 × 22.8 46.5 × 22.8 44.0 × 22.4 46.9 × 24.5 43.6 × 23.5	13·3 13·2 12·5 13·5 13·6	$   \begin{array}{c}     10.9 \times 6.8 \\     10.2 \times 6.2 \\     9.8 \times 5.8 \\     10.4 \times 6.5 \\     10.4 \times 6.7   \end{array} $	$ \begin{array}{c} 6.5 \times 6.6 \\ 6.3 \times 6.4 \\ 6.0 \times 5.9 \\ 6.5 \times 6.4 \\ 6.6 \times 6.3 \end{array} $	$ \begin{array}{c} 6.8 \times 6.7 \\ 6.7 \times 6.6 \\ 6.5 \times 6.3 \\ 7.0 \times 6.8 \\ 6.9 \times 6.7 \end{array} $	$7.0 \times 7.2 \\ 6.9 \times 6.9 \\ 6.7 \times 6.5 \\ 7.5 \times 6.8 \\ 7.1 \times 6.9$	$7.1 \times 7.0 7.1 \times 6.2 6.4 \times 5.8 7.5 \times 6.7 7.1 \times 6.5$
1427 1428	°° °	687 730	586 570	115	53 57	124·0 122·7	77•0 77•5	51·7×26·8 49·0×24·9	14·0 13·6	11.0×7.2 10.3×6.6	6·7×6·4 6·6×6·1	7·3 × 6·5 7·0 × 6·5	7·2×6·8 7·5×6·8	7·1×6·5 7·5×6·7

# Dendrolagus dorianus shawmayeri Rothschild & Dollman

Dendrolagus goodfellowi shawmayeri Rothschild & Dollman, 1936, Trans. Zool. Soc. Lond. 21: 484, 486.

Type locality: Kratke Mts., NE. New Guinea, 4,500 ft.

Dendrolagus dorianus shawmayeri Rothschild & Dollman, Tate, 1948, Bull. Amer. Mus. Nat. Hist. **91:** 237-351.

Six specimens. Five from NE. New Guinea: two co-types, juv. 250.1429, 31430 (skull only), from Arau, Kratke Mts.; juv. 21431 (skin only), Binemarian, Kratke

\* For D. d. notatus, see Appendix III, p. 318.

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Mts.; sex 50.1432 (flat skin only), north side Bubu River; 1814, near Herowagi, south slopes Bismarck Range; and one flat skin (no number) from mountains of SE. New Guinea, behind the island of Samaria.

No. 1429 is the co-type mentioned by Rothschild & Dollman (1936), who also refer to another specimen, presumably No. 1431.

Measurements in mm. (taken in the flesh):

Number	Sex	Head and body	Tail	Hind foot	Ear	Basal length	Zygomatic breadth	Nasals	318 <sup>1-2</sup>	p.	911 <sup>1</sup>	711 <sup>2</sup>	ent	926
50.1429 1430 1814	+0 0 <sup>x</sup> 0 <sup>x</sup>	480 	675 —	113 	<u>51</u> 	92.0 99.5 100.3	59 <sup>.7</sup> 61.3 63.7	44·9×15·3 46·1×21·3 44·0×19·7	11.2 11.0 11.9	9 <sup>•</sup> 8×5 <sup>•</sup> 5 9 <sup>•</sup> 9×4 <sup>•</sup> 8 9 <sup>•</sup> 6×5 <sup>•</sup> 0	5·4×4·9 5·3×5·1 5·7×5·3	5·8×5·1 5·7×5·2 6·0×5·5	6·1×5·0 6·1×5·2 6·2×5·5	6.0×5.0 6.1×5.2 6.0×5.4

#### \* juvenile

# Distoechurus pennatus neuhaussi Matschie

Distoechurus neuhaussi Matschie, 1916, Mitt. Zool. Mus. Berl. 8: 292.

Type locality: Sattelberg Mts., Huon Gulf, Dutch New Guinea.

Distoechurus pennatus amoenus Thomas, 1920, Ann. Mag. Nat. Hist. 6: 537.

Type locality: Rawlinson Mts., New Guinea.

Distoechurus pennatus neuhaussi Matschie, Tate & Archbold, 1937, Bull. Amer. Mus. Nat. Hist. 73: 388-390.

Ten specimens. Four from eastern Papau: 350.1073, 91076, 1074, 1075, Enaena, (1076 from Ikara), NE. slopes Mt. Simpson; and six from NE. New Guinea: 31387, 91388, 1389, Buntibasa district, Kratke Mts.; and 91811, juv. 91812 (in pouch of 1811), Yandara, Bismark Range; 31813, Guyebi, Bismarck Range.

This series extends the range of *neuhaussi* from the Sepik River area, NE. New Guinea (Tate & Archbold, 1937) to Mt. Simpson, eastern Papua. Very slight differences in the general colour of the specimens from the three localities can be noted. Those from eastern Papua are a uniform light brown, those from the Kratke Mts. slightly darker and more ochraceous, and those from Yandara and Guyebi (Mt. Wilhelm) slightly darker and greyer, though No. 1813 is hardly distinguishable from those from eastern Papua.

Number	Sex	Head and body	Tail	Hind foot	Ear	Basal length	Zygomatic breadth	Inter-orbital breadth	Nasals	Palatal length	Anterior palatal foramina
50.1075	Ŷ	108	137	20	12	26.1	17.2	5.8	11·5×3·8	15.4	3.2
1076	₽	109	136	20	II	25.9	17.2	· 5·8	11·4×3·3	16.0	3.2
1074	Ŷ	110	152	21	II	27.0	17.1	5.7	11.6×3.9	16.0	3.3
1073	3	113	145	21	12	26.8	17.7	6.0	12.8×3.5	16.2	3.3
1387	3	103	136	20.5	12	26.9	17.2	6.0	$- \times 3.4$		3.2
1389	Ŷ	109	149	21	12	27.9	19.2	6.7	12·7×3·7	16.2	3.6
1388	Ŷ	116	142	21	13	28.6	19.2	6.5	12·5×3·6	17.0	—
1813	3	112	148	20	12	27.6	19.7	6.3	12·1×4·0	-	3.2
1811	Ŷ	120	142	21	II	28.1	18.6	6 <b>·</b> 1	11·9×4·6	16•9	3.7

Measurements in mm. (taken in the flesh):

# Eudromicia caudata (Milne-Edwards)

Dromicia caudata Milne-Edwards, 1877, C. R. Acad. Sci., Paris, 85: 1079-1080.

Type locality: Arfak Mountains, Dutch New Guinea.

Eudromicia caudata (Milne-Edwards), Tate & Archbold, 1937, Bull. Amer. Mus. Nat. Hist. 73: 384-385.

Fourteen specimens. Eleven from NE. New Guinea: 350.1390, 91391, Saiko, Bubu River; 31083, 91084, 1085, 1086 (skin only), Tapu, Upper Ramu River Plateau; 31080, 1081, 91082, Baiyanka, SE. Bismarck Range; 31827, Yanka, eastern slopes Hagen Range; 91828, Yandara, Bismarck Range; and three from eastern Papua: 31077, 91078, Enaena, NE. slopes Mt. Simpson; 91079, Boneno, Mt. Mura.

The colour of the pelage of all the specimens is very similar and although Nos. 1390, and 1391 from the Bubu River are larger than the others their measurements are very similar to those given by Tate & Archbold (1937) for *caudata* from Matsika, Papua.

Number	Sex	Head and body	Tail	Hind foot	Ear	Basal length	Zygomatic breadth	Inter-orbital breadth	Nasals	Palatal length	Anterior palatal foramina	Posterior palatal foramina	$m^{1-3}$
50.1390	<b>*0</b> 04	97	163	18	18.5	25.2	17.6	5.4	11·7×3·6	15.6	2.4	4.0	4.6
1391	Ŷ	106	174	18.2	20	25.8	18.0	5.2	11·5×3·9	15.2	2 <b>·I</b>	4.0	4.6
1083	8	92	144	17	18	23.5	15.8	5.3	11·5 × 3·5	14.6	2.0	3.7	4.2
1084	우 우	92	145	17.2	17		16·0	5.7	10·5 × 3·6	14.4	2.0	3.7	4.3
1085	Ŷ	99	138	17	19	23.8	16.6	5.6	12·0×3·7	14.8	2.0	4.0	4.3
1080	3	98	147	18	18	24.2	16·0	5.2	12·1 × 3·9	14.6		3.9	4.2
1081	3	94	140	17	18	23.2	15.6	5.2	11·2×—	14.4	2.0	3.8	4.3
1082	Ŷ	97	148	17.2	17	23.9	16.1	5.3		14.9	2·I	3.7	4.4
1077	δ	101	153	18.5	20	22.6	15.4	5.0	11·0×3·4	13.8	2.0	3.6	4 <b>·</b> I
1078	<b>%0 0+ 0</b> +	92	143	17.2	18	23.9	<b>16.0</b>	5.4	11·8×3·7	14.6	2.0	3.8	4.1
1079	Ŷ	95	148	18	19	24.2	<b>16.0</b>	5.0	10·8 × 3·9	14.9	2.0	4.0	<b>.</b> 4°3
1827	8	108	145	19	18	25.1	17.1	5·1	11·6×3·7	15.2	2.0	3.9	4.2
1828	Ŷ	94	140	18	18.2	24.0	16.7	5.4	11·3×3·7		2.2		4 <b>·I</b>

Measurements in mm. (taken in the flesh):

# Dactylopsila trivirgata melampus Thomas

Dactylopsila melampus Thomas, 1908, Ann. Mag. Nat. Hist. 1: 122.

Type locality: Kokoda, Mambare River, SE. British New Guinea.

Dactylopsila hindenburgi Ramme, 1914, S.B. Ges. naturf. Fr. Berl. 1914: 413.

Type locality: Sattelberg, NE. New Guinea.

Dactylopsila biedermanni Matschie, 1916, Mitt. Zool. Mus. Berl. 2: 303. Type locality: Upper Aroa River, Papua.

Dactylopsila trivirgata melampus Thomas, Tate & Archbold, 1937, Bull Amer. Mus. Nat. Hist. 73: 393.

In all fifty-five specimens. Thirty-six from NE. New Guinea: twenty of these from the Kratke Mts.; 3 50.1305, juv. 3 1304, 9 1307, 1306, Arau district; 3 1291, 9 1292, juv. ?1293, Kambaidam; 9 1302, juv. 9 1301, Apimuri (Buntibasa district); 200. I, 10 Pp

juv. § 1303, Yampara; § 1297, 1296, 1295, 1294,  $\bigcirc$  1300, 1299, juv.  $\bigcirc$  1298, Buntibasa district; § 1309, 1308, juv.  $\bigcirc$  1310, Kuraka; twelve from near the Upper Waria River: § 1322, Bubu River district; § 1313,  $\bigcirc$  1314, 1318, 1319, 1320, 1321, juv.  $\bigcirc$  1316, juv.  $\bigcirc$  1317, juv. § 1311, juv. § 1312, juv.  $\bigcirc$  1315, Garaina; one § 1014 from Baiyanka, SE. Bismarck Range;  $\bigcirc$  1822 from Guyebi, Bismarck Range; and three, juv. § 1819, ad.  $\bigcirc$  1820, juv.  $\bigcirc$  1821, from Menebe, 8 miles east of Hagen Range, Sepik-Wahgi Divide. The following eighteen specimens are all from eastern Papua:  $\bigcirc$  1017, juv.  $\bigcirc$  1018, juv.  $\bigcirc$  1016, Ikara, NE. slopes Mt. Simpson; § 1019, 1020,  $\bigcirc$  1022, 1024, 1025, 1026, 1027, 1028, juv.  $\bigcirc$  1023, Enaena, NE. slopes Mt. Simpson; young ad. § 1034, juv. § 1035,  $\bigcirc$  1036, Boneno, nr. Mt. Mura; § 1030,  $\bigcirc$  1031, Wapona, N. slope Maneao Range.

This excellent collection of skins shows a great deal of variation in the length of hair. This is very obvious in the series from the Kratke Mts., which have on the whole longer hair and bushier tails than those from other parts of NE. New Guinea and eastern Papua, though one or two of these are similarly long haired. It is particularly marked in the young specimens. In No. 1301 the hair on the rump reaches a maximum for any specimen of about 8 cm. in length. Two specimens, juv. 3 1819, ad. 9 1820, collected by Mr. Shaw Mayer in 1946 at Menebe, Sepik-Wahgi Divide, NE. New Guinea, 6,000 ft., about 120 miles to the north-east of the Kratke Mts., also have long hair and bushy tails. It may be that the length of the hair is associated with the age of the animal, as on the whole larger specimens have shorter hair.

The amount of greyish hair in the tail varies from virtually none (Nos. 1310, a very dark specimen, 1293, 1294, and 1295, all from the Kratke Mts.) to about two-thirds (Nos. 1297 and 1322). Several specimens (mostly females) have white tips to their tails (P 1307, 1306, 1299, 1018, young, of black tipped, P 1017, 1022, 1023, 1024, 1036, J 1313, 1020, 1014)

Specimen No. 1020, an adult 3, is of interest as the black chin spot is divided in two by a white stripe running from the throat to the middle of the lower lip, as in typical *trivirgata* or *t. infumata*. In every other respect it is typical *melampus*. The following are the measurements in millimetres of fourteen adult males and

twenty-two adult females of *melampus*:

			Extren	ies	Ave	rage	Stan devie	dard ation
			3	Ŷ	3	ę	б	Ŷ
Head and body         .           Tail         .         .           Hind foot         .         .           Ear         .         .	:	. 263- . 46-	-287 -398 -51 -31•5	220-327 243-382 44-5 <sup>2</sup> 26-32	249 348 48 29	246 344 48 29	13·1 29·3 1·9 1·6	10·3 25·0 2·4 1·7

# Dactylopsila tatei sp. n.

*Type locality*: Mts. above Taibutu village, Faralulu district, West Fergusson Island, SE. New Guinea, 2,000–3,000 ft.

Type: Adult  $\bigcirc$  50.1327, collector's No. 433, 30 July 1935. Skin and skull.

Paratypes: ♀ 50.1325, collector's No. 421, 1326, collector's No. 423, 1329, collector's No. 435, juv. 1328, collector's No. 434 (of 1327), 1331, collector's No. 438 (skull and piece of skin), ♂ 1323, collector's No. 425, 1324, collector's No. 431, 1330, collector's No. 439 (skull and piece of skin), Mts. above Taibutu village, Faralulu district, West Fergusson Island, SE. New Guinea, 2,000–3,000 ft.

These nine specimens of *Dactylopsila* taken in West Fergusson Island are most nearly allied to D. t. trivirgata. The black and white markings on the head and back are very similar, the median stripe being a little darker than the two lateral ones. The hairs on the backs of the fore and hind feet are whitish. They are at once distinguished from trivirgata by the absence of the large black chin spot and by the shorter tail which, on the upper side, has only a few or no grey hairs near the base. On the underside the transition from grey to black takes place at about 70–80 mm. from the base. The tip of the tail is white.

The skull is very similar to that of trivirgata but is smaller.

Measurements in mm. of the type and paratypes (taken in the flesh):

Number	Sex	Head and body	Tail	Hind foot	Ear	Condylo-basal length	Zygomatic breadth	Inter-orbital breadth	Nasals	Palatal length	Anterior palatal foramina	Breadth mesop- terygoid fossa	Width inside of m <sup>1</sup> -m <sup>1</sup>	p4-m4	991-3
50.1327 Type	Ŷ	213	274	45	24	48.6	35.5	7.3	17·8×7·8	25.0	3.0	6.2	7·0	11.2	8.2
1325	Ŷ	200	270	44.5	24	48.4	36.0	7.2	17.9×8.2	24.9	2.4	6.5	6.7	11.6	8.1
1326	Ŷ	195	267	43	22.5	47.3	35.9	7.5	17·8×7·5	25.2	2.2	7.0	7.2	11.8	8.4
1329	Ŷ	195	273	43	24	46.7	34.0	7.6	16·1×6·8	25.0	2.5	6.2	6.6	11.4	8.1
1328	Q <b>*</b>	130	179	33.5	20	35.0	25.0	6.3	13•7×6·3		2.2				
1331	Ŷ	183	262	42	23	44.8	31.8	6.8	16.0×2.0	23.9	2.9	6.5	6.7	11.2	8.4
1323	ి	181	283	46	22	46.0	33.9	7.2	17·0×6·7	24.2	2.4	6.6	7.0	I 2·0	8.5
1324	ð	173	265	43.5	22	43.6	32.2	7.2	15·8×5·7	23.1	2.7	6.6	6•6	11.4	8·1
1330	ర	210	286	46	24	48.8	36.4	8.0	17·7×7·2	26.0	3.3	7.0	7.3	11.6	8.0

\* juvenile

# Dactylonax palpator (Milne-Edwards)

Dactylopsila palpator Milne-Edwards, 1888, Mem. Soc. Philom. Centenaire, Paris: 173-177. Type locality: Aroa River, Papua.

Dactylopsila palpator ernstmayri Stein, 1932, Z. Säugetierk. 7: 254.

Type locality: Junzaing, Saruwaged Range, Huon Peninsula, New Guinea.

Dactylonax palpator (Milne-Edwards), Tate, 1945, Amer. Mus. Novit., No. 1305:5.

Twenty-two specimens. Four from eastern Papua: juv. 3 50.1032,  $\varphi$  1037, juv.  $\varphi$  1033, Boneno, Mt. Mura; young ad.  $\varphi$  102, Enaena, NE. slopes Mt. Simpson; and eighteen from NE. New Guinea: 3 1015, Baiyanka, SE. Bismarck Range; 3 1332, Kuraka, Kratke Mts.; 3 1336–1340,  $\varphi$  1341–1345, Bubu River district;  $\varphi$  1333–1335 (one young in pouch, collectors No. 486*a*), Saiko, Bubu River; 3 1823, juv. 3 1824, Yanka, eastern slopes Hagen Range;  $\varphi$  1825, Tomba, SW. slopes Hagen Range.

In this excellent series there are five specimens which have a well-developed white ring of hair round their wrists (Nos. 1337, 1342, 1037, 1336, and 1033) which is the only distinctive character given by Stein (1932) for the race *ernstmayri* which Tate (1945) suggests is synonymous with *palpator*; this certainly appears to be the case in this series. It is noticeable that the males grow to a larger size than the females. Measurements in mm. (taken in the flesh):

Number	Sex	Head and body	Tail	Hind foot	Ear	Condylo-basal length	Zygomatic breadth	Inter-orbital breadth	Nasals	$p^4-m^4$	m <sup>1-8</sup>
50.1015	3	255	235	49	28	57	46.2	9.4	22.5×8.4	13.6	9.3
1340	8	240	236	47	30	—	_	-	-	—	_
1332	8	239	227	50	27	57.9	46.6	9.2	22.5×7.7	12.9	8.6
1338	8	238	212	48	29					_	-
1337	8	232	213	45.5	28	54.0	43.7	9.2	19·9 × 6·8	12.2	8.6
1336	8	232	230	47	29	—		—	_	-	-
1032	ð	220	212	47	29	54.8	41.3	8.6	20·2 × 5·7	13.2	9.2
1037	Ŷ	235	205	50	30	55.8	44'4	8.9	21·0×6·9	13.4	9.0
I343	Ŷ	224	201	45.5	27.5		—	—		—	
1345	♀	222	215	46	30	—	—	—	_	_	-
I334	P P	211	200	45	28	53.7	4 <b>1</b> .6	8.9	20·I × 6·4	12.7	8.8
I344	₽ P	208	194	43.5	27	—	—				-
1342	₽ P	208	207	43	25	51.2	43.9	8.5	18·8×6·9	12.2	8.5
1335	2	208	203	45	26	50.0	43.2	9.5	19·6 × 6·2	12.3	8.3
1341	*0 0+ 0+ 0+ 0+ 0+ 0+ 0+ 0+ 0+	204	216	48	27.5	—		—		-	—
1333	Ŷ	207	198	42.5	27	50.6	42.4	9.2	21·5×6·8	12.0	8.2
1823	8	235	212	46	26.5	52.0	44.8	9.4	21·0×8·2	13.0	8.9
1825	Ŷ	196	200	44	25.5	45.5	38·3	8.4	17·9×6·8	13.0	9.0

# Petaurus breviceps papuanus Thomas

Petaurus breviceps var. papuanus Thomas, 1888, Catalogue of the Marsupialia and Monotremata in the British Museum: 158.

Type locality: Huon Gulf, eastern New Guinea.

Petaurus (Petaurella) papuanus papuanus Tate & Archbold, 1937, Bull. Amer. Mus. Nat. Hist. 73: 387.

Petaurus breviceps papuanus Thomas, Tate, 1945, Amer. Mus. Novit., No. 1305:9.

Five specimens. Three, 350.1377, 1378, 91379, from Taibutu, Faralulu district West Fergusson Island, SE. New Guinea; and two from NE. New Guinea: 31380, Garaina, Upper Waria River; 91826 (white-tipped tail), Degabaga, 8 miles east Hagen Range, Sepik-Waghi Divide.

# Petaurus breviceps tafa Tate & Archbold

Petaurus (Petaurella) papuanus tafa Tate & Archbold, 1935, Amer. Mus. Novit., No. 810: 1; 1937, Bull. Amer. Mus. Nat. Hist. 73: 387.

Type locality: Mt. Tafa, Central Division of Papua.

Petaurus breviceps tafa Thomas, Tate, 1945, Amer. Mus. Novit., No. 1305:10.

Ten specimens. Seven from NE. New Guinea: 350.1382, 1381, 91383, Kambaidam, Kratke Mts.; 31385, 1384, 91386, Saiko, Bubu River; 31069, Baiyanka, SE. Bismarck Range; and three from eastern Papua; 31070, Enaena, NE. slopes Mt. Simpson; 31071, 91072, Boneno, Mt. Mura.

These highland specimens are new to our collection. They were taken between 4,000 and 7,500 ft. and agree with Tate & Archbold's description of the dark-coloured mountain race *tafa* (especially when comparing teeth measurements),

though the pelage on the back is only 9–10 mm. long as compared with 12 mm. in the type. They are smaller than typical *papuanus*, grey ventrally with only a slight buffy overwash. Three of them, 3 1382, 9 1386 and 9 1072, have a patch of buffy hairs in the middle of the belly, and 3 1069 has a white tip to its tail.

Measurements of four specimens which range from the smallest to the largest are given.

Measurements in mm. (taken in the flesh):

Number	Sex	Head and body	Tail	Hind foot	Ear	Basal length	Zygomatic breadth	Inter-orbital breadth	Beadth braincase	Nasals	Palatal length	Anterior palatal foramina	p <sup>a</sup> -m <sup>4</sup>	<b>111</b> -3	$p^4$	m <sup>1</sup>	łn²
50.1072	0+ 10 10 10	123	154	22	23	27·6	22·4	6·7	16·2	10·7×5·0	16·3	1.8	6·6	4·5	1.0	1.9×1.8	1·5×1·5
1381		128	178	23	22·5	31·0	23·3	7·1	15·7	13·4×5·8	17·7	1.9	7·2	4·7	1.4	2.0×1.8	1·6×1·7
1382		133	160	22·5	22	30·9	24·2	7·0	16·0	12·9×5·3	17·7	1.9	7·3	4·8	1.3	1.9×1.8	1·6×1·7
1385		137	174	24	23·5	30·9	23·0	7·2	16·2	13·4×5·8	17·9	1.9	7·1	4·7	1.4	1.8×1.7	1·5×1·6

## **Pseudocheirus** (**Pseudochirops**) cupreus cupreus Thomas

Pseudochirus cupreus Thomas, 1897, Ann. Mus. Stor. nat. Genova, 38: 145-146.

Type locality: Mount Owen Stanley, British New Guinea.

Pseudochirus (Pseudochirops) cupreus obscurior Tate & Archbold, 1935, Amer. Mus. Novit., No. 810: 3-4.

Pseudocheirus (Pseudochirops) cupreus cupreus Thomas, Tate, 1945, Amer. Mus, Novit., No. 1287: 20-21.

Seventeen specimens, all from NE. New Guinea: 350.1369, 1370, 1372, juv. 31368, juv. 31371, Saiko, Bubu River; 91373, 1374, 1375, Bubu River district; 31367, Sasara, Kratke Mts.; 31066, juv. 31067, 91068, Baiyanka, SE. Bismarck Range; 31063, juv. 31062, 91065, juv. 91064, Tapu, Upper Ramu River Plateau; 91818, Yanka, eastern slopes Hagen Range.

The pelage of these specimens does not differ markedly from that of the adult type specimen, but the immature specimens are much darker.

They extend the range of this species to the north-west as far as the Upper Ramu River Plateau.

### Pseudocheirus mayeri Rothschild & Dollman

Pseudochirus mayeri Rothschild & Dollman, 1932 (November) Abstr., Proc. Zool. Soc. Lond. No. 353:15.

Type locality: The Gebroeders, Weyland Mts., Dutch New Guinea.

Pseudochirulus pygmaeus Stein, 1932 (December), Z. Säugetierk. 7: 257.

Type locality: Sumuriberg, Weyland Mts., Dutch New Guinea.

One specimen, 3 50.1808, Tomba, SW. slopes Hagen Range, NE. New Guinea.

This species is found high up in the mountains between 6,000 and 12,000 ft. It appears that this is the first record of its occurrence outside Dutch New Guinea and so extends its known range into eastern New Guinea. The pelage is dense, and very soft, the upper parts greyish brown and the underparts buff with the bases of the hairs grey. The hands and feet are a light brownish buff and there is a whitish patch

### MAMMALS COLLECTED BY MR. SHAW MAYER

of hairs at the base of the ears. The measurements of this specimen agree very closely with those for mayeri (pygmaeus) given by Tate (1945).

Measurements in mm. (taken in the flesh):

-	Number	Sex	Head and body	Tail	Hind foot	Ear	Condylo-basal length	Zygomatic breadth	Nasals .	p4	p4-m4	9111-3	m <sup>1</sup>	
	50.1808	8	194	176	25	20	42.2	24.2	13·5 × 6·0	2·1×1·5	11.2	7.5	2.7×2.1	2·2×1·8

# Pseudocheirus forbesi forbesi Thomas

Pseudochirus forbesi Thomas, 1887, Ann. Mag. Nat. Hist. 19: 146. Type locality: Sogere, Astrolabe Range, SE. New Guinea, 2,000 ft. Pseudocheirus forbesi forbesi Thomas, Tate, 1945, Amer. Mus. Novit., No. 1287:11.

Five specimens all from eastern Papua: 3 50.1039, 1040, juv. 3 1042, 9 1041, Enaena, NE. slope Mt. Simpson; 9 1038, Boneno, Mt. Mura.

Measurements in mm. (taken in the flesh):

Number	Sex	Head and body	Tail	Hind foot	Ear	Condylo-basal length	Zygomatic breadth	Nasals	$p^{4-m^4}$	$m^{1-3}$
50.1039	3	250	238	36	20	49.8	29.2	17·8×7·0	14.2	8.9
1040	3	277	271	37	19	52.7	29.9	$- \times 7.8$	14.1	9.2
1041	Ŷ	227	238	33	19	45.7	27.2	16·1 × 6·7	13.2	8.8
1038	Ŷ	230	255	33	20	47.4	28.0	— ×6·6	13.8	8.8

# Pseudocheirus forbesi larvatus (Fôrster & Rothschild)

Phalanger larvatus Fôrster & Rothschild, 1911, Ann. Mag. Nat. Hist. 7: 1337.

Type locality: Rawlinson Mountains, Huon Peninsula, New Guinea.

Pseudochirulus capistratus Matschei, 1915, S.B. Ges. naturf. Fr. Berl. 1915: 92.

Type locality: Schrader Mts. between the Sepik and Ramu Rivers, NE. New Guinea. *Pseudochirulus barbatus* Matschie, 1915, ibid.: 93.

Turne leveliters Cattellarry month of Harry Calf NE N

Type locality: Sattelburg, north of Huon Gulf, NE. New Guinea.

Pseudocheirus forbesi larvatus (Fôrster & Rothschild), Tate, 1945, Amer. Mus. Novit., No. 1287:12.

Fourteen specimens all from NE. New Guinea: 3 50.1346, juv. 3 1347, ? sex 1348 and 1349 (skulls only), Kambaidam, Kratke Mts.; 3 1350, Buntibasa, Kratke Mts.;  $\Im$  1351, Kuraka, Kratke Mts.; 3 1043,  $\Im$  1044, Tapu, Upper Ramu River Plateau;  $\Im$  1045, Baiyanka, SE. Bismarck Range; 3 1354, 1352, 1353, 1355, Saiko, Bubu River; 3 1809, Yanka, eastern slopes Hagen Range.

There is a great similarity between the general colouring of these specimens and

### IN NEW GUINEA, 1932-1949

P. f. forbesi, but they are larger (see measurements) and usually have much darker tails.

Measurements in mm. (taken in the flesh):

Number	Sex	Head and body	Tail	Hind foot	Ear	Condylo-basal length	Zygomatic breadth	Nasals	$p^{4}$ - $m^{4}$	<b>11</b> <sup>-3</sup>
50.1346	3	295	300	39	20	58.9	35.7	21·0×8·4	15.3	10.2
1348	?		_	—	—	54.9	31.3	- 7.3	15.9	10.4
1349	?			—	—	53.2	29.7	- 6.8	15.0	9.9
1350	<b>*0</b> 04	—	—	39	20	56.0	30.6	20·4 × 6·8	15.9	10.2
1351	Ŷ	270	. 285	38	19	57.2	31.1	20·9×7·5	15.2	10.0
1043	3	292	280	35	20	58.8	34.7	20·8×7·0	15.1	9.8
1044	Ŷ,	236	250	31	19	<b>50</b> •6	28.5	— 6·5	14.2	9.9
1045	3	298	310	40	20	59.0	32.8	- 7.5	16.3	10.0
1354	3	286	302	42	23.5	56.4	32.1	21·4×8·1	15.4	10.1
1352	3	260	270	38	21.2	52.1	29.2	18·2×7·0	14.8	9.9
1353	3	298	319	41	23.2	56.7	32.7	19·8×8·8	15.5	9.9
1355	3	323	307	39	23	61.2	34.6	22·0×9·8	15.0	9.2
1809	3	251	268	40	19	52.7	30.2	18·9×7·6	15.6	10.6

# Pseudocheirus canescens gyrator Thomas

Pseudochirus canescens gyrator Thomas, 1904, Ann. Mag. Nat. Hist. 14: 401.

Type locality, Lindum Creek, Gira River district, NE. of the Central Range, Dutch New Guinea, 600 ft.

Pseudocheirus canescens gyrator Thomas, Tate, 1945, Amer. Mus. Novit., No. 1287: 14-15.

Four specimens all from eastern Papua: ♂ 50.1046, ♀ 1048, 1047, Enaena, NE. slopes Mt. Simpson; ♀ 1049, Ikara, NE. slopes Mt. Simpson.

These four specimens from eastern Papua are very similar to the type specimen, which up to now appears to have been unique. The general colour is brownish-grey (two specimens, Nos. 1046 and 1047, are rather greyer than the others); the head, face, cheeks, fore and hind limbs are pale brown; and there is a well-marked fuscous frontal stripe and a darker line down the middle of the back. The ears are fuscous and have dark hairs round their bases. Ventrally the hairs are brownish-buff, their bases sometimes grey.

Measurements in mm. (taken in the flesh):

Number	Sex	Head and body	Tail	Hind foot	Ear	Condylo-basal length	Zygomatic breadth	Mastoidal breadth	Nasals	Palatal length	Anterior palatal foramina	p4-1114	<b>332</b> 1-3
50.1047 1046 1049 1048	0+ 10 0+ 0+	201 225 230 234	173 192 200 182	29 33 28 28	17 18 16•5 17	44·7 46·9 47·3 47·3	26·7 27·5 27·5 28·0	21·8 22·6 22·1 23·4	$   \begin{array}{r} 15.8 \times 5.7 \\    15.9 \times 6.7 \\    17.8 \times 6.0 \\    16.9 \times 6.8 \\   \end{array} $	22·8 23·7 24·5 24·4	3·9 4·3 4·3 4·7	12·5 12·3 12·2 11·7	8·0 7·8 7·8 7·7

### **Pseudocheirus (Pseudochirops) corinnae corinnae** Thomas

Pseudochirus corinnae Thomas, 1897, Ann. Mus. Stor. nat. Genova, 38: 142-144.

Type locality: Mountains of Vanapa River district, British New Guinea.

Pseudocheirus (Pseudochirops) corinnae corinnae Thomas, Tate, 1945, Amer. Mus. Novit., No. 1287: 20.

Fourteen specimens all from NE. New Guinea: 350.1050, 91051, Baiyanka, SE. Bismarck Range; 31052, Tapu, Upper Ramu River Plateau; 31358, 1359, 1360, 91361, Buntibasa district, Kratke Mts.; 91356, 1357, Kuraka, Kratke Mts.; 31362, 91363, 1364, 1365, Saiko, Bubu River district; 91366, Bubu River district.

These specimens closely resemble the co-type and other specimens of *corinnae* in this Museum except for No. 1361, an adult female in which the dorsal pelage resembles that of P. c. argenteus. It is a bright rusty colour especially on the rump and tail, but ventrally is just the same colour as *corinnae*, a light dirty yellowish-grey.

These specimens extend the range of the species to the north-west as far as the Upper Ramu River Plateau.

Number	Sex	Head and body	Tail	Hind foot	Ear	Basal length	Zygomatic breadth	Nasals	Palatal length	Anterior palatal foramina	$p^{4}-m^{4}$	m <sup>1-3</sup>
50.1052	3	340	294	42	24	61.7	39.7	21·0×9·9	36.3	4.9	19.8	13.0
1050	5	318	288	49	22	57.2	36.1	21·2×8·6	33.8	4.4	20.0	13.6
1051	*00+0+	300	315	47	23	56.6	37.2	20·3×9·0	32.7	5.6	20.7	12.9
1356	2	325	315	44	23	60.1	37.8	21.5×9.0	35.3	5.0	20.8	13.8
1358	3	340	345	50	25	63.2	42.3	22.0×11.0	36.7	5.1	20.5	13.3
1357	9	317	305	47	22.5	59.4	37.5		35.2	5.2	20.0	13.2
1363	*0 0+ 0+	340	335	51	24	62.3	40.0	20.0 × 9.8	36.4	6.2	19.2	12.8
1364	Ŷ	350	320	47.5	25	62.4	40.0	22·2 × 10·6	36.6	5.6	19.6	12.7
1365	¢ ¢	315	315	46.5	25		38.4	c. 20.0 × 9.2		5.4	20.2	13.4
1362	3	325	305	48	24	62.1	40.3	21.7×9.7	36.9	5.0	20.7	13.7
 1366	10 Of	345	323	47.5	26	61.4	39.0	21·0 × 10·8	36.4	5.4	19.8	12.8

Measurements in mm. (taken in the flesh):

Pseudocheirus (Pseudochirops) corinnae fuscus subsp. n.

Type locality: Ikara, NE. slopes Mt. Simpson, eastern Papua, SE. New Guinea,  $\pm 4,000$  ft.

Type: Adult 950.1058, collector's No. 761, 16 August 1940. Skin and skull.

Paratypes: 3 50.1054, collector's No. 763, 1055, collector's No. 764, young ad. 1053, collector's No. 762, 1057, collector's No. 757, young ad. 1056, collector's No. 753, Ikara, NE. slopes Mt. Simpson, eastern Papua,  $\pm$ 4,000 ft.; 1059, collector's No. 774, 1060, collector's No. 785, Enaena, NE. slopes Mt. Simpson, eastern Papua,  $\pm$  5,000 ft.; 1061, collector's No. 945, Boneno, nr. Mt. Mura, eastern Papua, 4,000–5,000 ft.

Rather darker than typical corinnae. Most of the hairs are a dark greyish-brown

tipped with silver, buffy, rust, or black. The black median dorsal stripe is well defined and there is an indistinct dark brown stripe along each side of the back. There is a patch of white or yellowish-white hairs at the base of the ears.

This race can be at once distinguished from typical *corinnae* by the very distinct, usually diamond-shaped patch of white hairs on the throat and chest. The rest of the ventral surface is a rather dark yellowish-grey or yellowish-brown.

The general appearance and the measurements of the skull are very similar to those of typical corinnae; one of the main differences, however, is in the length of  $p^{4}-m^{4}$  and  $m^{1-3}$ . Both are usually longer, the greatest lengths recorded for specimens in this collection being  $p^{4}-m^{4} = 21 \cdot 8$  with  $m^{1-3} = 14 \cdot 3$ , compared with maximum lengths for typical corinnae of  $p^{4}-m^{4} = 20 \cdot 8$  with  $m^{1-3} = 13 \cdot 8$  (see table). The frontals are often more depressed than those of typical corinnae, the supraorbital ridges are well developed, and in adult specimens there is a well-developed sagittal crest.

Measurements in mm. of the type and paratypes (taken in the flesh):

Number	Sex	Head and body	Tail	Hind foot	Ear	Basal length	Zygomatic breadth	Nasals	Palatal length	Anterior palatal foramina	$p^{4}-m^{4}$	m <sup>1-3</sup>
50.1056	0 <sup>+</sup> 0	333	329	47	25	62.0	38.0	22·0×9·8	36.4	5.9	21.5	13.8
1057	Ŷ	330	350	51	25	62.8	39.8	20·5×9·8	37.0	5.4	21.3	14.4
1058 Type	Ŷ	352	310	49	25	61.4	39.1	21·8×10·1	35.2	5.8	20.2	13.4
1053	8	334	326		27	61.0	40.0	19·7 X 10·6	36.7	5.2	21.4	13.9
1054	8	337	345	50	27	64.0	42.8	22 <b>·</b> 9 × 10·8	37.6	5.4	21.8	14.3
1055	3	354	371	51	27	65.2	44.7	22·1×11·5	38.3	5.7	21.4	13.2
1059	Ŷ	326	335	50	25	58.8	37.6	$- \times 8.7$	35.0	5.4	21.5	14.6
1060	ģ	319	315	49	28	58.7	38.2	21.0 × 10.5	34.8	4.8	21.5	13.8
1061	Ý	339	354	50	26	62.4	40.2	21·2×10·0	36.9	5.4	20.9	13.7

### Phalanger orientalis orientalis (Pallas)

Didelphis orientalis Pallas, 1766, Miscellanea Zoologica: 59-62.

Type locality: Amboina, off SW. coast of Ceram.

?Phalangista quoy Gaimard, 1824, Bull. Sci. Nat. Paris, 1: 271.

Quoy & Gaimard, Voyage. . . . Uranie et Physicienne. Zoologie: 58, t.l. Waigeu.

? Coescoes amboinensis Lacépède, 1801, Mém. Inst. Paris, 3: 491, t.l. Amboina.

Phalanger o. orientalis (Pallas), Tate, 1945, Amer. Mus. Novit., No. 1283: 1-31.

Three specimens, 3 50.1285, 1286, juv. 1287 (skull and piece of skin) from the Faralulu district, West Fergusson Island, SE. New Guinea.

These specimens are very similar to others in the British Museum's collection. The general colour is white, tinged, especially on the throat and sides of the neck, with yellow. The dorsal surface is covered with longer black-brown hairs which are most numerous on the head and neck, on all four feet and base of tail, and, of course, along the dorsal line, which is well defined.

200. I, IO

Measurements in mm. (taken in the flesh):

Number	Sex	Head and body	Tail	Hind foot	Ear	Basal length	Zygomatic breadth	Mastoidal breadth	Nasals	$p^{4}-m^{4}$	m <sup>1-3</sup>	$p^4$	11. <sup>1</sup>
50.1285 1286	5050	389 397	362 340	60 	25·5	75·5 76·1	50·9 57·5	40·0 42·7	29·3 × 12·8 34·8 × 14·6	22•2 22•8	13·6 15·0	4·7 4·4	4·6×3·8 5·0×4·0

### Phalanger vestitus (Milne-Edwards)

Cuscus vestitus Milne-Edwards, 1877, C.R. Acad. Sci. Paris, 85: 1080.

Type locality: Karons Mountains, Tamrau Mountains, northern Vogelkop.

Phalanger carmelitae Thomas, 1898, Ann. Mus. Stor. nat. Genova, 39: 5.

Type locality: Upper Vanapa River, British New Guinea.

Phalanger sericeus Thomas, 1907, Ann. Mag. Nat. Hist. 20: 74.

Type locality: Owgarra, Angabunga River, SE. New Guinea.

Phalanger coccygis Thomas, 1922, Ann. Mag. Naí. Hist. 9: 673.

Type locality: Surawaged Mts., Huon Peninsula, New Guinea.

Phalanger vestitus (Milne-Edwards), Tate, 1945, Amer. Mus. Novit., No. 1283: 16.

Forty-six specimens. Thirty-two from NE. New Guinea: 350.1269, 1270, 91271, 1272, 1273, juv. 91274, Sasara, Kratke Mts.; 91275, juv. 91276, Buntibasa district, Kratke Mts.; 31277, 1278, 1279, 91280, juv. 91281, Saiko, Bubu River; 31262, 1263, 1264, 1265, 91266, 1267, 1268, 1284, Bubu River district; juv. 91283, Arau, Kratke Mts.; 3992, 996, duplicate—collector's No. 735 (skull only), 9997, juv. 91000, juv. 3998, juv. 3999, Baiyanka, Bismarck Range; 3993, 994, juv. 995, Tapu, Upper Ramu River Plateau; 31817, Yanka, eastern slopes Hagen Range; and fourteen from eastern Papua; 3989, 990, Mt. Mura; 3991, 1002, 91004, juv. 91003, Boneno, Mt. Mura; 91001, Bibitau, Mt. Orian; 91005, juv. 921009 (young of 1005), 1008, 1006, 1010, juv. 31007, Enaena, NE. slopes Mt. Simpson.

This excellent collection of skins which includes those of fourteen juvenile specimens indicates the great variability in the colour and length of hair in this species, from a short-haired pale silvery-brown specimen (adult Q 1004) through intermediate forms which are nearer the type specimen of *carmelitae* Thomas (1898) to a dark brown longer-haired specimen (adult Q 994) which is very similar to the type of *sericeus* Thomas (1907). The type of *coccygis* Thomas (1922) also fits into this series, supporting the view suggested by Tate (1945) that *carmelitae, sericeus*, and *coccygis* are synonymous. There is also a great similarity in appearance between the juvenile forms and a specimen of *P. vestitus* which we have in this Museum and which I am unable to distinguish from the young specimens in the Shaw Mayer collection. The pelage of these specimens is usually longer than that of the adults, and is a little darker and somewhat grizzled, especially along the sides of the body; and the dark brown mid-dorsal line is more clearly defined.

The type of vestitus (Cuscus vestitus Milne-Edwards), which I have not seen, is a young specimen and the description of it agrees with that of the young specimens

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in this collection. It appears, therefore, that *carmelitae*, *sericeus*, and *coccygis* are synonymous with *vestitus* and not races of it as suggested by Tate (1945).

The hair on the backs of specimens 1273 and 1284 is very short as it has been clawed off by the young.

The following are the measurements in millimetres of seventeen adult males and fourteen adult females of *vestitus*:

			Extr	emes	Ave	erage		dard ation
			ð	ę	3	Ŷ	ð	Ŷ
Head and body			327-437	353-455	408	407	28.1	29.3
Tail			305-404	333-387	356	367	26.3	15.2
Hind foot .			56-66	57-62	6 <b>0</b>	60	3.9	2.0
Ear			19-27	20-26	23	24	2·I	2.1
Basal length .			68.3-78.8	68.8-78.4	74.4	73 <b>·</b> 1	3.3	2.9
Zygomatic breadth		.	47 <b>·0</b> –56·9	45.4-52.3	51.1	48.9	2.6	1.8
Mastoidal breadth			37.4-45.3	37.0-46.4	41.8	41.0	2.4	2.5
Nasals, length .			26.3-31.9	25.6-31.3	29 <b>·0</b>	27.7	1.0	1.0
Nasals, breadth			10.0-14.2	10.1–13.1	12.3	11.0	1.1	0.0
p <sup>4</sup> -m <sup>4</sup>			23.7-26.8	23.7-26.7	25.2	25.0	0.0	0.0
m <sup>1-3</sup>			15.7-17.7	15.2-17.9	16.6	16.3	0.2	0.2

*Measurements* in mm. of twelve juvenile specimens (taken in the flesh):

	Number	Sex	Head and body	Tail	Hind foot	Ear	Basal length	Zygomatic breadth	Mastoidal breadth	Nasals
	50.1274	Ŷ	275	270	46	20	53.5	36.8	29.7	23·1 × 10·8
	1276	0+ 0+ 0+ 0+ 0+ 0+ 0+	325	295	53	21	6 <b>0·</b> 7	40.0	32.6	24·2 × 10·1
	1281	Ŷ	315	300	49	23	59.1	39.1	31.0	20·0×11·5
	1283	Ŷ	280	300	51	20	54.9	38.0	31.2	22•9×10•0
	1008	Ŷ	328	342	54	24	6 <b>0</b> •6	38.2	31.1	21·7×11·1
	1006	Ŷ	355	323		—	63.4	42.0	34.1	25·0×10·5
	1010	Ŷ	341	341	57	26	64.7	40.2	33.5	25·0×10·3
	1007	ð	<b>40</b> 6	392	63	27	73.4	48 <b>·o</b>	38.8	26•0×12•0
	998	5	343	340	57	23	64.3	42.2	36.2	— ×11·7
	999	5	364	323	59	24.5	6 <b>7·0</b>	43.2	36•8	24·5×11·4
	995	%00+0+	338	335	52	21	6 <b>0·7</b>	40.2	33.6	22·0×10·9
_	1003	<u></u> ٢	376	344	57	25	66•9	42.0	33.7	25·0 × 12·2

# Phalanger gymnotis (Peters & Doria)

Phalangista gymnotis Peters & Doria, 1875, Ann. Mus. Stor. nat. Genova, 37: 543 Type locality: Aru Islands.

Phalanger leucippus Thomas, 1898, ibid. 39: 7-8.

Type locality: Upper Vanapa River, British New Guinea.

Phalanger gymnotis (Peters & Doria), Tate, 1942, Amer. Mus. Novit., No. 1283: 1-31.

Ten specimens. Seven from NE. New Guinea: juv. 3 50.1261, Saiko, Bubu River; 3 1258, juv. 3 1259, juv. 9 1260, Bubu River district; ad. 3 1257, Kambaidam,

Kratke Mts.; ad. 9984, 985, Baiyanka, SE. Bismarck Range; and three from Eastern Papua: juv. 986, Enaena, NE. slopes Mt. Simpson; 3988 (Boneno Camp), Mt. Maneao; 3987, Mt. Mura.

These specimens extend the range of this species to the north and south of its previously recorded range, from the Bismarck Range, NE. New Guinea, to Mt. Simpson in the south of eastern Papua.

The skins show little variation in colour from the type of *leucippus* (= gymnotis) in the British Museum's collection; the younger specimens are darker, and have a more pronounced median dorsal stripe, than the adult specimens.

Measurements in mm. (taken in the flesh):

Number	Sex	Head and body	Tail	Hind foot	Ear	Basal length	Zygomatic breadth	Mastoidal breadth	Nasals	$p^{4}$ - $m^{4}$	<i>1</i> 11-3
50.984 985 988 987 1258 1257	0+ 0+ 60 50 50 50	415 400 472 470 440 465	318 310 355 330 320 350	64 65 69 63 66	27 29 30 30 28 30	70·3 67·8 80·5 79·9 78·4 83·1	48.9 45.0 58.5 60.1 54.4 60.1	41·2 39·0 49·1 47·6 48·1 50·0	39·8×11·9 28·8×10·9 34·4×12·9 33·7×12·6 34·1×13·6 34·2×15·0	25.6 25.5 24.0 24.8	15·7 15·5 14·6 15·0

# Echymipera oriomo Tate & Archbold

Echymipera oriomo Tate & Archbold, 1936, Amer. Mus. Novit., No. 823:1.

Type locality: Dogwa, Oriomo River, Western Division of Papua.

One specimen  $\mathcal{Q}$  50.1139, from Tapu, Upper Ramu River Plateau, NE. New Guinea.

One fully adult (old) specimen, judging from the skull of a species which is new to our collection. The teeth are very worn down both in the upper and lower jaws, and many of them are missing. The tail has been broken off at the root. Miklouho-Maclay (1884) mentions that specimens of bandicoots sometimes have the tail lost (or bitten off?).

It is a small-sized species with spinous pelage and relatively small-sized teeth. The colour of the pelage agrees with that described for *oriomo* Tate (1936), and though many of the measurements of this specimen are larger than those of the type this may be due to differences in age, which may also account for the difference in the size of the posterior palatal openings and those of the type *oriomo*. In the type these extend from the front of  $m^{I}$  to the back of  $m^{2}$ , whereas in this specimen they extend from the front of  $m^{I}$  to between  $m^{3}$  and  $m^{4}$ . Differences in the breadth of the teeth (they are wider in our specimen) may be due to wear.

*Measurements* in mm. (taken in the flesh; measurements of type in parentheses): Head and body 291 (244); tail—broken off; hind foot 48 (47); ear 23.5; skull, basal length 57.3 (52.3); zygomatic breadth 25.9 (24.0); nasals  $26.9 \times 5.0$  (damaged) ( $24.3 \times 4.8$ ); palatal length 38.6 (35.2); anterior palatal foramina 6.0; posterior palatal foramina 8.4 (from front of m<sup>1</sup> to between m<sup>3</sup> and m<sup>4</sup>); teeth (crowns) m<sup>1-3</sup>

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9.9 (10.5);  $m^{1-2} c. 6.2$ ;  $m^{1}$  (length × breadth)  $3.0 \times 3.0$ ;  $m^{2}$  missing;  $m^{3} 3.5 \times 4.0$ ;  $m^{1-2}$  (to front of  $m^{3}$ ) 6.5.

# Echymipera doreyana doreyana (Quoy & Gaimard)

Perameles doreyana Quoy & Gaimard, 1830, Voyage de la corvette l'Astrolabe, Zool. 1:100. Type locality: Dorey (nr. Manokwari), Dutch New Guinea.

Perameles cockerelli Ramsay, 1877, Proc. Linn. Soc. N.S.W. 1: 310, 378. Type locality: New Ireland.

Perameles myoides Gunther, 1883, Ann. Mag. Nat. Hist. 11: 247. Type locality: New Britain.

Brachymelis garagassi Miklouho-Maclay, 1884, Proc. Linn. Soc. N.S.W. 9: 713. Type locality: Maclay Coast (Cape Croisilles to Cape King William), NE. New Guinea.

Anuromeles rufiventris Heller, 1897, Abh. zool. anthrop. ethn Mus. Dresden, 6: 5.

Type locality: Bongu, Astrolabe Gulf, New Guinea.

Suillomeles hispida Allen & Barbour, 1909, Proc. New England zool. Cl. 4: 44. Type locality: Manokwari, Dore Bay, Dutch New Guinea.

Perameles doreyana and breviceps Cohn, 1910, Zool. Anz. 35: 724.

Echymipera doreyana doreyana (Quoy & Gaimard) Tate, 1948, Bull. Amer. Mus. Nat. Hist. 92: 332-333.

Two specimens: 950.1420, Taibutu, Faralulu district, West Fergusson Island, SE. New Guinea; and 3138, Wapona, north slope Maneao Range, eastern Papua. *Measurements* in mm. (taken in the flesh):

Number	Sex	Head and body	Tail	Hind foot	Ear	Basal length	Zygomatic breadth	Nasals	Palatal length	Anterior palatal foramina	Posterior palatal foramina	pa-m4	$m^{1-3}$	₩1-8	312 <sup>1</sup>	8.14	S166
<b>50.1</b> 420	0+ *0	321	99	55°5	27	62·6	25·9	34·6×4·6	41·0	4·9	6.0	15.6	11·0	7·3	3·9×2·6	3·5 × 2·9	3·9×3·4
1138		342	84	65	32	69·0	27·3	34·7×6·6	45·7	8·7	6.7	18.1	12·4	8·1	4·4×2·6	4·0 × 3·2	4·4×4·0

# **Peroryctes raffrayanus raffrayanus** (Milne-Edwards)

Perameles raffrayanus Milne-Edwards, 1878, Ann. Sci. Nat. Zool. 7: Art. 11: 1-2. Type locality: Amberbaki, Vogelkop, Dutch New Guinea.

Peroryctes raffrayanus raffrayanus (Milne-Edwards), Tate, 1948, Bull. Amer. Mus. Nat. Hist. 92: 327.

Five specimens. Four specimens from NE. New Guinea, 350.1407, Kuraka, Kratke Mts.; 91411, Sasara, Kratke Mts.; juv. 91408, 31410 (skull and piece of skin), Kambaidam, Kratke Mts.; and one juv. 91137, from Enaena, NE. slopes Mt. Simpson, eastern Papua.

Measurements in mm. (taken in the flesh):

Number	Sex	Head and body	Tail	Hind foot	Ear	Basal length	Zygomatic breadth	Nasals	Palatal length	Anterior palatal foramina	Posterior palatal foramina	pa-ma	111 <sup>1-8</sup>	111 1-3	m. <sup>1</sup>	3)1 <sup>2</sup>	111 <sup>3</sup>
50.1407		358	197	80	32	77·4	31·1	38·6 × 6·3	49 <sup>.</sup> 7	9·8	11·1	17·2	12.0	8·2	4·3×2·7	3·8×3·1	3·9×3·4
1411		333	174	72	31.5	72·1	30·1	34·9 × 5·0	47 <sup>.</sup> 0	7·5	9'7	16·2	11.2	7·9	4·0×2·7	3·8×3·0	3·7×3·4

### MAMMALS COLLECTED BY MR. SHAW MAYER

### Peroryctes longicauda ornata (Thomas)

Perameles ornata Thomas, 1903, Proc. Zool. Soc. Lond. 2: 201. Type locality: Avera, Aroa River, British New Guinea. Peroryctes longicauda ornatus (Thomas), Tate, 1948, Bull. Amer. Mus. Nat. Hist. 92: 329.

Fourteen specimens all from NE. New Guinea: 350.1121, 1122, 91123, Tapu, Upper Ramu River Plateau; 31124, Baiyanka, SE. Bismarck Range; 31414, 1418, 91415, 1416, 1417, Kuraka, Kratke Mts. and Kambaidam, Kratke Mts.; 31312, 91413, Saiko, Bubu River; 31840, 1841, Degabaga, 8 miles east of Hagen Range, Sepik-Wahgi Divide; 91842, Menebe, 8 miles east of Hagen Range, Sepik-Wahgi Divide.

These specimens agree closely with the type except that the five specimens from the Kratke Mts. are more rufous, especially ventrally.

Number	Sex	Head and body	Tail	Hind foot	Ear	Condylo-basal length	Zygomatic breadth	Inter-orbital breadth	Nasals	Palutal length	Anterior palatal foramina	Posterior palatal foramina	pa-ma	31 <sup>1-3</sup>	111-2
50.1121	5	260	196	59	25	60.0	23.1	12.8	24.8×4.5	35.9	5.2	8.6	13.2	9.4	6.5
1122	ð	258	178	56	25.2	58.6	22.5	13.2	23·3×4·6	35.7	5.2	8.9	13.8	10.3	7.0
1123	Ŷ	24I	184	55	25	55.1	22.6	13.3	23.3×4.6	32.9	4.8	7.3	12.6	9.2	6.4
1124	ð	267	194.	59	26	61.2		13.2	26.0×5.7	36.2	5.I	8.8	13.1	9.2	6.3
1414	ð	258	204	60	26	58.7	23.0	13.0	24.5×5.5	34.9	5.8	7.8	13.6	10.2	7.0
1418	5	257	207	56	26	60.6	23.3	13.1	24·8×4·7	36.1	5.6	9.4	13.2	10.0	6.9
1415	P P	258	187	54	24	58.3	22.4	12.6	23.9×5.0	34.2	-	8.3	13.3	9.7	6.6
1416	Ŷ	239	185	56	27	58.3	22.5 .	12.6	23·4×4·6	34.3	-	8.5	13.1	9.5	6.5
1417	Ŷ	263	190	58	26	59.0	22.6	12.3	25·1×4·9	35.0	4.8	8.7	12.7	9.3	6.3
1412	ð	275	217	61	26.5	61.2	22.8	12.7	26·8×5·1	37.0	6.0	7.6	14.3	10.7	7.3
1413	Ŷ	262	194	56	26.5	57.3	21.6	12.0	25·2×4·5	33.8	5.3	6.9	12.0	9.8	6.8
1840	ő	282	216	61	26.5	62.7	23.8	13.8	27.0×4.9	37.3	5.0	7.9	13.6	10.0	6.9
1841	ð	266	188	56	25	59.8	23.4	13.6	25.6×5.0	35.5	5.2	8.1	13.6	9.9	6.9
1842	Ŷ	265	196	54	25	59.7	22.3	13.0	26·3×4·6	35.9	4.1	8.5	13.4	9.8	6.8

Measurements in mm. (taken in the flesh):

## Peroryctes longicauda magna subsp. n.

*Type locality*: Ikara, NE. slopes Mt. Simpson, eastern Papua, SE. New Guinea. 3,500 ft.

Type: Adult & 50.1126, collector's No. 768, 18 August 1940. Skin and skull.

Paratypes: ♂ 50,1125, collector's No. 751, Ikara, NE. slopes Mt. Simpson, eastern Papua, 3,500 ft.; ♀ 1128, collector's No. 830, juv. ♀ 1129, collector's No. 818, juv. ♂ 1127, collector's No. 884, Enaena, NE. slopes Mt. Simpson, eastern Papua, 4,000 ft.

The colour and marking of the skins of this series is almost identical with that of the type of *Peroryctes longicauda ornata*, but the specimens are larger and have slightly longer tails, and the undersides are a little darker buff. The general body colour is pale brown speckled with black, with a prominent black mid-dorsal line. This line begins between the eyes, broadens out on the crown and nape, and continues to the base of the tail. There is also a black streak running through each eye from the root of the whiskers to the base of the ear, and a black line on each side of the rump parallel with the median line, which passes on to the back of the hind legs. Unlike *ornata* there are very few longer hairs on the underside of the tail, but a line of longer hairs is usually present along each side.

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The skull is very similar to that of *Peroryctes longicauda ornata* but is a little larger; the additional pair of anterior palatal foramina are smaller and may be minute.

Measurements in mm. of the type and paratypes (taken in the flesh):

Number	Sex	Head and body	Tail	Hind foot	Ear	Condylo-basal length	Zygomatic breadth	Nasals	Inter-orbital breadth	Palatal length	Anterior palatal foramina	Posterior palatal foramina	$p^{4-m^4}$	$m^{1-3}$	m <sup>1-2</sup>
50.1126 Type 1125 1128 1129 1127	*0 *0 0+ 0+ *0	302 290 303 226 276	258 243 226 193 240	69 67 63 53 64	28 28 27 25 28	68·5 65·7 76·3 51·7 61·7	25·1 24·0 25·1 19·8 23·1	$29.4 \times 5.6 28.0 \times 5.6 28.1 \times 5.2 21.8 \times 4.5 28.0 \times 5.4$	13·2 12·9 13·3 11·8 13·0	39.6 39.2 39.6 31.4 36.9	6·1 6·0 5·5 5·6 6·2	8.5 8.5 8.9  7.9	15·1 15·1 13·9 	10.2 10.2 10.8	7·4 7·6 6·8 7·4

\* juvenile

# Peroryctes papuensis sp. n.

Type Locality: Boneno, Mt. Mura (30 miles NW. Mt. Simpson) Main Range, eastern Papua, SE. New Guinea, 4,000-5,000 ft.

Type: Adult 3 50.1130, collector's No. 816, 3 September 1940. Skin and skull.

Paratypes: 950.1135, collector's No. 982, 1136, collector's No. 994, Boneno, Mt. Mura, eastern Papua, 4,000–5,000 ft.; 91133, collector's No. 865, 1132, collector's No. 862, 1131, collector's No. 812, juv. 1134, collector's No. 813, Enaena, NE. slopes Mt. Simpson, eastern Papua, 4,000–5,000 ft.

These specimens have the same marking as *Peroryctes longicauda ornata*, but they are much smaller and the general colour of their skins is darker. There is a prominent black mid-dorsal line which begins between the eyes, broadens out on the crown and nape, and continues to the base of the tail. A black streak runs through each eye and there are two short black lines on the rump, one on each side of the middle line, which pass on to the back of the hind legs. The pelage on the underside of the body is quite a rich orange-buff except in the juvenile specimens where it is light grey. As in *P. longicauda ornata* the hairs on the underside of the tail are longer than those on the upper side.

The skulls are similar to those of *P. longicauda ornata*, but are much smaller and not so heavily built.

Measurements in mm. of the type and paratypes (taken in the flesh):

Number	Sex	H ead and body	Tail	Hind foot	Ear	Condylo-basal length	Zygomatic breadth	Nasals	Inter-orbital breadth	Palatal length	Anterior palatal foramina	Posterior palatal foramina	$p^{4-m^4}$	971 <sup>1-8</sup>	m1-2
50.1130 Type 1135 1136 1133 1132 1131 1131 1134	*0 0+ 0+ 0+ 0+ 0+ 0+	198 196 175 200 193 191 127	155 150 142 155 155 143 105	45 45 43 45 44 43 32	27 28 25 26 27 26 21	48.5 48.0 43.9 47.4 47.4 47.4 33.1	17·7 17·6 16·9 17·2 17·6 17·0 14·0	$20.5 \times 4.0$ $20.4 \times 4.0$ $18.7 \times 3.3$ $20.4 \times 3.2$ $19.9 \times 3.5$ $19.9 \times 3.1$ $12.8 \times 3.3$	11.0 10.7 10.1 10.6 10.5 10.4 8.5	29.6 28.0 26.2 28.2 28.6 27.5 19.4	4.0 4.6 4.5 4.2 4.4 4.4 4.5 3.7	7·I 7·7 6·3 5·6 5·9 6·0 2·9	10.5 9.8 10.0 9.7 10.2 9.8	7.4 7.2 7.5 6.8 7.5 6.9	5.0 4.7 4.9 4.7 4.9 4.6 5.0

\* juvenile

### Satanellus albopunctatus (Schlegel)

Dasyurus albopuntatus Schlegel, 1880, (January) Notes Leyden Mus. 2: 51-53. Type locality: Arfak Mts., Dutch New Guinea.

Dasyurus fuscus Milne-Edwards, 1880, (June) Ann. Mag. Nat. Hist. 6: 172.

Type locality: Arfak Mts.; Dutch New Guinea. Dasyurus daemonellus Thomas, 1904, Ann. Mag. Nat. Hist. 14: 402.

Type locality: Avera, Aroa River, S. coast, Papua.

Satanellus albopunctatus (Schlegel), Tate, 1947, Bull. Amer. Mus. Nat. Hist. 88: 142-143.

Fourteen specimens. Thirteen from NE. New Guinea: 3 50.1393, 9 1394, juv. 9 1395, Buntibasa district, Kratke Mts.; 3 1392, Kambaidam, Kratke Mts.; 3 1397, 1398 (skull and piece of skin), Kuraka, Kratke Mts.; 3 1396, Arau, Kratke Mts.; 3 1399, Saiko, Bubu River; 3 1090, 1091, Baiyanka, SE. Bismarck Range; 3 1093, 9 1094, Tapu, Upper Ramu River Plateau; 3 1810, Yanka, eastern slopes Hagen Range; and one 9 1092 from Enaena, NE. slopes Mt. Simpson, eastern Papua.

This useful series supports the view expressed by Tate (1947) that the three forms synonymized above are alike, the seeming differences being mainly due to age.

Measurements in mm. (taken in the flesh):

Number	Sex	Head and body	Tail	Hind foot	Ear	Basal length	Zygomatic breadth	Inter-orbital breadth	Nasals	Palatal length	Anterior palatal foramina	₩1 <sup>-3</sup>	m <sup>1-2</sup>	111.4 1
50.1094	Ŷ	241	221	43	29	50.2	34.1	12.0	18.6×7.8	28.5	3.2	11.8	7.7	4.3
1093	3	231	224	46	27	48.0	30.5	11.0	18.2×7.7	27.4	3.7	12.5	8.4	5.0
1091	3	262	244	44.5	27	54.3	37.6	13.6	21.7×9.6	30.9	3.7	11.6	7.8	4.7
1090	3	250	247	47	29	53.7	_	12.1	22.0×8.3	31.4	4.0	12.8	8.5	5.0
1092	Ŷ	275	280	51	27	60.5	37.0	14.1	23.0×9.7	33.8	4.4	12.5	8.4	4.8
1397	3	271	270	45	29		35.1	13.2	22.7×11.1	29.9	<u> </u>	11.6	7.7	3.9
1398	3	283	259	47	30	57.8	37.7	15.2	24.7×11.2	31.3	3.6	12.3	8.3	4.7
1394	Ŷ	255	253	46.5	20	52.3	34.7	13.6	19.9×6.7	29.8	2.9	12.3	8.2	4.7
1393	3	283	271	50	31.9	58.0	39.5	15.5	23.9×9.8	32.7	4.2	12.4	8.3	4.7
1392	3	279	277	50	29	59.3	38.5	15.3	25.3×11.8	32.1	3.7	12.3	8.2	4.6
1396	3	280	264	51	31.5	59.8	40°I	13.6	22.7×8.8	32.9	3.0	12.3	8.3	4.9
1399	3	298	290	54	29	62.8	39.7	15.0	25.7×9.5	34.9	5.0	13.2	9.0	5.2
1810	3	269	239	46	30	55.6		9.9	21.0×8.1	30.0	4.4	11.2	7.5	4.9
	-	1			1	00-		1 33			1			

### Neophascogale lorentzi (Jentink)

Phascogale lorentzii Jentink, 1911, Notes Leyden Mus. 33: 234.

Type locality: Hellwig Mts., Dutch New Guinea, 2,600 metres.

Phascogale nouhuysii Jentink, 1911, ibid. 33: 235.

Type locality: Bivak Island, Dutch New Guinea,  $\pm$  1,050 metres.

Phascogale lorentzii venusta Thomas, 1921, Ann. Mag. Nat. Hist. 8: 358.

Type locality: Weyland Mts., Dutch New Guinea, 6,000 ft.

Phascogale venusta rubrata Thomas, 1922, Nova Guinea....onder leiding van....A. F. Herderschee 13: 739.

Type locality: Mount Goliath, central Dutch New Guinea.

Neophascogale lorentzii (Jentink), Tate, 1947, Bull. Amer. Mus. Nat. Hist. 88: 136.

Three specimens from Yanka, eastern slopes Hagen Range, NE. New Guinea, 350.1804, 1805, young ad. 21806.

These are very similar to the specimens from Dutch New Guinea in this Museum, but are not so rufous.

#### IN NEW GUINEA, 1932-1949

Measurements in mm. (taken in the flesh):

Number	Sex	Head and body	Tail	Hind foot	Ear	Condylo-basal length	Zygomatic breadth	Nasals	Inter-orbital breadth	Palatal length	Anterior palatal foramina	911-3	₽4	911 <sup>1</sup>	ML <sup>2</sup>	e Ill
50.1804 1805 1806	රී රී y. ad. ♀	171 200 184	188 213 207	40 42 39	23 24 24	44·3 51·0 47·0	22·5 26·3 23·7	18·3×6·3 23·0×7·8 19·5×6·0	10.2 10.2 10.1	25·4 28·8 26·0	4·2 4·9 4·5	8·4 8·3 8·0	1.0 1.4	3·0×1·9 2·9×2·0 2·7×1·9	2·7× 2·6 2·8× 2·5 2·7× 2·5	2·7 × 2·9 2·6 × 2·8 2·6 × 2·9

# Murexia longicaudata longicaudata (Schlegel)

Phascogale longicaudata Schlegel, 1866, Ned. Tijdschr. Dierk., Amsterdam, 3: 356. Type locality: Aru Islands.

Murexia l. longicaudata (Schlegel), Tate, 1947, Bull. Amer. Mus. Nat. Hist. 88: 117.

Seven specimens all from the Kratke Mts., NE. New Guinea: 350.1400, 1401, 1402 (skull only), 91403 (skull and piece of skin), Kambaidam; 31406, Kuraka; 31405, 1404, Buntibasa district.

These specimens agree closely with the descriptions of *longicaudata* particularly when comparison is made of the measurements of the molar teeth, which in some cases are almost exactly the same as those for the type. They are new to our collection.

Measurements in mm. (taken in the flesh):

	_							_							
Number	Sex	Head and body		Tail	Hind foot	Ear		Condylo-hasal	length	Zygomatic	or country	Nasals		Inter-orbital breadth	Breadth brain- case
50.1405 1404 1403 1400 1406 1402	50 500+ 50 50	143 130 120 140 150		166 160 155 155 182	29 28·5 26·5 28 30	19·5 20 19 20 21·5		3 3 3 3	8·5 5·7 3·3 7·9 9·6 1·0	22°0 19° 18° 24°0 24°0	5 7 5	15.0× 13.8× 11.7× 13.9× 15.9× 16.0×	5·0 4·8 4·9 5·3	7·9 7·8 7·4 7·5 7·4 7·4	14.6 14.6 13.9 14.0 14.6 14.6
Number		Palatal length	Anterior pala- tal foramina	Width mesop- terygoid fossa	Width inside m1-1	Outer corners of m <sup>3</sup>	41-3	- 244		-96		<b>m2</b>	en 	- 201	312.4
50.1405 1404 1403 1400 1406 1402	2 I 2 2	1.7 0.1 8.5 0.9 2.3 2.7	3.5 3.1 3.2 3.7 3.9	4°4 4°5 4°0 4°3 4°6 4°6	5·8 5·4 5·1  6·4 6·6	12·0 11·9 11·7 	7' 7' 7' 8' 7'	•6 •7	2·7> 2·7> 2·6> 2·7> 2·7> 2·7>	< 1.9 < 1.8 < 1.8 < 1.8 < 1.8 < 1.9 < 2.0	2· 2· 2· 2·	$6 \times 2 \cdot 3$ $6 \times 2 \cdot 3$ $5 \times 2 \cdot 3$ $7 \times 2 \cdot 4$ $6 \times 2 \cdot 5$ $7 \times 2 \cdot 4$	2·2> 2·3> 2·2> 2·3> 2·3> 2·3>	< 2·7 < 2·7	$2 \cdot 0 \times 2 \cdot 6$ $2 \cdot 0 \times 2 \cdot 8$ $1 \cdot 8 \times 2 \cdot 7$ $2 \cdot 0 \times 2 \cdot 9$ $2 \cdot 1 \times 2 \cdot 9$ $2 \cdot 0 \times 2 \cdot 6$

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# Murexia longicaudata parva subsp. n.

Type locality: Baiyanka, Ramu River Divide, SE. Bismarck Range, 7,500 ft.
Type: Adult & 50.1114, collector's No. 685, 6 June, 1940. Skin and skull.
Paratypes: & 50.1117, collector's No. 595, 1118, collector's No. 598, \$\$\overline\$ 1119, collector's No. 593, Tapu, Upper Ramu Plateau, 6,000 ft.; \$\$\$ 1113, collector's No. 667, 1115, collector's No. 690, 1120, collector's No. 663 [in spirit], \$\$\$\$ 1116, collector's No. 635, Baiyanka, Purari-Ramu Divide, SE. Bismarck Range, 7,500 ft.

This is a small and rather slender race of *Murexia longicaudata*. The general colour of the pelage is similar to that of *l. longicaudata* but is a little longer and softer, the hairs on the back being about 7 mm. long, finely grizzled mouse-grey dorsally and silvery grey or buffy grey ventrally; the hands and feet are pale brown and the long tail is covered with short, light brown hairs except at the tip, where for a distance of from 10 to 47 mm. or so the hairs are white. The hairs are longer on the underpart of the tail and project beyond the tip.

Skull similar to that of *l. longicaudata* but much smaller. *Measurements* in mm. of the type and paratypes (taken in the flesh):

Number	Sex	Head and body	Tail	Uind foot	1006 11111	Ear		Conayto-basat length	Zygomatic twoodth		Nasals		Inter-orbital breadth	Outer corners m <sup>3</sup>
50.1114 Type 1113 1115 1116 1119 1117 1118	50 50 40 40 07 07 50 50	132 131 127 115 122 109 123	175 173 154 148 153 150 161	26 25 23 24 25	•5	19·5 18 20 17 17 17 19		34·3 33·3 32·3 30·9 31·5 30·0 33·0	19·1 18·2 17·1 16·2 16·2	2 [ 5 7	13·2× 11·9× 12·4× 11·0× 11·7× 10·8× 12·4×	4·1 4·4 3·5 4·5 3·7	7·7 7·8 8·0 7·3 7·4 7·0 7·8	10.9 10.0 9.9 9.8 9.9 9.9 9.9 10.4
Number	m <sup>1-3</sup>	Breadth brain	case	Palatal length	Anterior palatal foramina	Width mesop- terygoid fossa	Width inside m <sup>1</sup> -m <sup>1</sup>		m <sup>1</sup>		m <sup>2</sup>		200	30E 4
50.1114 Type 1113 1115 1116 1119 1117 1118	6. 6. 6. 6. 7.	8 13 9 13 8 13 7 13 6 13 9 13	3·5 3·0 3·0 2·5 2·4 2·0 3·1	18.6 18.3 18.2 17.0 17.1 16.5 18.3	3.6  3.4 3.4 3.4 3.4 3.2 3.6	$ \begin{array}{r}     4 \cdot 0 \\     3 \cdot 6 \\     3 \cdot 2 \\     3 \cdot 6 \\     3 \cdot 5 \\     3 \cdot 5 \\     3 \cdot 2 \\     3 \cdot 6 \\   \end{array} $	5.0 4.4 4.5 4.0 4.5 3.9 4.8	2·5 2·5 2·5 2·4 2·4 2·4		2· 2· 2· 2· 2·	$4 \times 2 \cdot 0$ $3 \times 2 \cdot 1$ $4 \times 2 \cdot 1$ $3 \times 2 \cdot 1$ $3 \times 2 \cdot 1$ $3 \times 2 \cdot 0$ $4 \times 2 \cdot 1$	2·I 2·I 2·2 2·1 2·1 2·1 2·0	$\begin{array}{c} \times 2 \cdot 3 \\ \times 2 \cdot 4 \\ \times 2 \cdot 4 \\ \times 2 \cdot 3 \end{array}$	$1.8 \times 2.4 \\ 1.8 \times 2.4 \\ 1.6 \times 2.1 \\ 1.7 \times 2.4 \\ 1.7 \times 2.2 \\ 1.7 \times 2.3 \\ 1.8 \times 2.4 $

# Murexia rothschildi (Tate)

Phascogale (Murexia) rothschildi Tate, 1938, Novit. Zool. 41: 58. Type locality: Aroa River, Papua, probable altitude  $\pm$  4,000 ft. Murexia rothschildi (Tate), 1947, Bull. Amer. Mus. Nat. Hist. 88: 118.

Six specimens all from eastern Papua: 3 50.1107, Ikara, NE. slope Mt. Simpson; 3 1109, 1108, juv. 9 1110 (skull and unstuffed skin), Enaena, NE. slope Mt. Simpson; 3 1111, 9 1112, Boneno, Mt. Mura.

The only specimens of this interesting species which appear to have been previously recorded are the type—Tring Museum, Field No. 1, a male, and another male collected by the same collector on the same day, A.M.N.H. No. 108106. It is easily distinguished from *longicaudata* and its various races by the broad black mid-dorsal stripe.

Measurements in mm. (taken in the flesh):

Number	Sex	Head and body	Tail	Hind foot	Ear	Condylo-basal length	Zygomatic breadth	Nasals	Inter-orbital breadth	Outer corners m <sup>3</sup>	<i>m</i> <sup>1-3</sup>
50.1107	3	156	178	29	21.5	39.8	20.0	14·8×6·0	7.4	11.0	7.7
1109	3	154	184	27	20	38.0	21.7	13·0×5·5	7.2	11.0	7.5
1108	3	150	162	26	20	38.1	21.2	13·7×5·5	7.8	12.4	7.8
IIII	3	132	163	27	19	34.0	18.8	12·0×4·0	7.8	11.6	7.8
1112	Ŷ	124	152	25	19	31.9	17.8	11·0×4·0	7.6	II·2	7.7

# Antechinus melanurus (Thomas)

Phascogale melanura Thomas, 1899, Ann. Mus. Stor. nat. Genova, 40: 191.

Type locality: Moroka, British New Guinea, 1,300 m.

Phascogale melanura modesta Thomas, 1912, Ann. Mag. Nat. Hist. 9: 92.

Type locality: Mt. Goliath, Dutch New Guinea.

Antechinus melanurus (Thomas), Tate, 1947, Bull. Amer. Mus. Nat. Hist. 88: 129.

Thirteen specimens. Five from eastern Papua: 3 50.1103, young ad. 3 1102,  $\begin{array}{l}
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\end{array}$  1104, 1105, Enaena, NE. slopes Mt. Simpson; 3 1106, Boneno, Mt. Mura; and eight from NE. New Guinea: 3 1100, 1101, Baiyanka, SE. Bismarck Range; 3 1834, 1835, 1836, (3 1837, 9 1838, in spirit), Tomba, SW. slopes Hagen Range; 3 1839, Degabaga, 8 miles east of Hagen Range, Sepik-Wahgi Divide.
\end{array}

The general colour of all the specimens is very similar; the orange patch of hair behind the ears is not so well developed in the two specimens from the Bismarck Range and the one from Degabaga.

Measurements in mm. (taken in the flesh):

Number	Sex	Head and body	Tail	Hind foot	Ear	Condylo-basal length	Zygomatic breadth	Nasals	Inter-orbital breadth	Outer corners m <sup>3</sup>	111-3
50.1103	5	123	142	23	17	31.2	17.9	10.9×4.8	7.1	9.7	5.6
1102	y. ad. 3	III	137	22	17	29.5	16.7	9.8×3.9	7.3	9.6	6.1
1104	P	115	143	22	17	30.0	17.5	11·2×4·0	7.3	9.5	6.0
1105	<b>P</b>	112	135	21.5	16.2	29.8	17.7	10.8×4.0	7.5	9.9	6.0
1106	. 3	112	130	22	16	28.4	17.5	9.8×4.1	7.2	9.7	5.8
1100	5	114	140	22	16	29.0	17.0	10·8×4·0	7.3	9.7	6.0
1101	5	103	122	21	16	26.7	16.2	9.8×3.9	7.2	9.0	5.7
1834	5	107	129	21	16	28.4	16.3	10.0 × 4.2	7.0	8.8	6.0
1835	5	99	125	21	15	27.0	15.8	10.0 × 4.2	6.5	9.2	5.9
1836	5	110	138	22.5	15	30.2	17.2	12.0×4.9	7.2	9.5	6.0
1839	5	115	144	22	16	29.0	17.5	11.0×4.0	7.9	9.5	5.7
1837	0+0+ 50 50 50 50 50 50 50 50 50		-	-		28.4	16.2	10.8×4.4	6.9	9.2	6.0
1838	Ŷ		<u> </u>		-	27.9	16.4	10.2 × 4.4	7.0	9·1	5.8

# Antechinus hageni sp. n.

Type locality: Tomba, SW slopes Hagen Range, Central Highlands, NE. New Guinea, 8,200 ft.

Type: Adult & 50.1829, collector's No. 1097, 30 June 1947. Skin and skull.

Paratypes: young ad. 250.1830, collector's No. 1101, (31831, collector's No. 1111, 1832, collector's No. 1115, in spirit), Tomba, SW. slopes Hagen Range, NE. New Guinea, 8,200 ft.; 21833, collector's No. 1052, Yanka, eastern slopes Hagen Range, Central Highlands, NE. New Guinea, 5,500 ft.

The measurements of this small species are very similar to those for A. wilhelmina and from its general body colouring it appears to belong to Tate's A. flavipes group which, in New Guinea, contains melanurus, mayeri, centralis, tafa, misim, and wilhelmina. The general body colour is a uniform brownish-grey, the bases of the hairs grey, the tips yellowish-brown. The rump is not contrastingly reddish as in wilhelmina. There are no ear patches. The hairs on the underparts are grey based and tipped with white. The hands and feet are pale brown, the digits buffy. The tail is brown above and pale buffy below.

Number	Sex	Head and body	Tail	Hind foot	Ear	Condylo-basal length	Zygomatic breadth	Nasals	Inter-orbital breadth	Palatal length	Posterior palatal foramina	il-ma	htt <sup>1-4</sup>	m <sup>1-3</sup>	Width m <sup>1</sup>	Outer corners m <sup>3</sup>
50.1829 Type 1830 1833 1831 1832	ර් y. ad. ද ද රී	109 96 105 —	125 131 119 —	21 20 20 —	17·5 18 17 —	29.6 28.3 28.2 29.9 27.5	16·0 15·0 14·7 17·1 15·0	$   \begin{array}{r} 12.5 \times 4.5 \\ 11.5 \times 3.5 \\ 11.5 \times 3.8 \\ 11.5 \times 4.9 \\ \times 3.5 \end{array} $	7·8 7·6 7·6 8·0 7·8	16·3 15·2 15·5 16·5	4·3 4·8 3·8 5·0 c. 4·5	15.5 14.9 14.9 15.5 14.3	6·3 6·3 6·3 6·3 6·2	5·5 5·4 5·5 5·6 5·5	I·4 I·4 I·4 I·4 I·4	8·9 9·0 9·0 9·4 8·9

Measurements in mm. of the type and paratypes (taken in the flesh):

# Phascolosorex dorsalis whartoni (Tate & Archbold)

Phascogale (Phascolosorex) dorsalis whartoni Tate & Archbold, 1936, Amer. Mus. Novit., No. 823: 4.

Type locality: Eastern slope of Mt. Tafa, Central Division of Papua, 2,070 metres.

Phascolosorex dorsalis whartoni (Tate & Archbold), Tate, 1947, Bull. Amer. Mus. Nat. Hist. 88: 138.

Six specimens, all from NE. New Guinea: ♂ 50.1098, 1095, 1097, 1096, ♀ 1099, Baiyanka, SE. Bismarck Range; ♀ 1807, Menebe, 8 miles east of Hagen Range, Sepik-Wahgi Divide.

Number	Sex	Head and body	Tail	Hind foot	Ear	Condylo-basal length	Zygomatic breadth	Nasals	Inter-orbital breadth	Mastoidal breadth
50.1098	5	166	143	25.5	21	39.0	22.5	15·7×6·1	8.3	16.1
1095	°0 °0 °00+	162	137*	26.5	21	40.4	21.2	15·7×5·7	7.0	16.6
1097	3	144	128	25.0	19	37.0	20.2	13·7×5·9	8.0	15.1
1096	3	138	135	25.0	18	36.4	19.8	13·7×5·6	8.4	15.0
1099	9	123	119	23.5	18	34.0	17.6	11·8×5·0	7.9	14.3
1807	Ŷ	119	123	24.0	16	33.4	16.2	12.6×5.4	8.1	13.4

Measurements in mm. (taken in the flesh):

Number	Palatal length	Anterior palatal foramina	Posterior palatal foramina	p <sup>4</sup>	<i>1</i> 1.1	111.2	1123	Outer corners m <sup>3</sup>	111-3
50.1098	20.8	3.6	4.0	1.0	2·5×1·6	2·3×2·0	2·2 × 2·2	11.1	7.0
1095	22.0	3.8	4.0	I •O	2·4×1·6	2·3×2·0	2•2×2•4	10.2	` 6.8
1097	20.2	3.6	4·1	1.0	2.6×1.7	2.6×2.1	2·3×2·5	11.0	7.5
1096	19.4	3.2	4.3	0.8	2·4×1·6	2•3×2•0	2.0×2.3	11.0	6.7
1099			3.2	0.9	2·4×1·6	2·3×2·0	$2\cdot 2 \times 2\cdot 2$	10.0	6.9
1807				0.0	2·4 × 1·5	2·3×1·9	$2 \cdot I \times 2 \cdot I$	10.3	6.8

\* Tip broken off.

### RODENTIA

# Anisomys imitator Thomas

Anisomys imitator Thomas, 1903, Proc. Zool. Soc. Lond. 2: 199–200. Type locality: Aroa River, British New Guinea.

Three specimens, all from NE. New Guinea: 3 50.1159, 1160, Buntibasa district, Kratke Mts.; 3 1161, Saiko, Bubu River.

### **Pogonomys macrourus** (Milne-Edwards)

Mus (Pogonomys) macrourus Milne-Edwards, 1877, C.R. Acad. Sci. Paris, 85: 1081. Type locality: Arfak, Dutch New Guinea.

Pogonomys lepidus Thomas, 1897, Ann. Mus. Stor. nat. Genova, 38: 614.

Type locality: Haveri, Astrolabe Range, Papua. Pogonomys lepidus huon Tate & Archbold, 1935, Amer. Mus. Novit., No. 803: 6.

Type locality: Huon Peninsula, Dutch New Guinea.

Pogonomys lepidus derimapa Tate & Archbold, 1935, Amer. Mus. Novit., No. 803: 6. Type locality: Mount Derimapa, Dutch New Guinea.

Seventeen specimens. Fourteen from NE. New Guinea: two from the Kratke Mts.,  $\eth$  50.1167, Buntibasa district and  $\eth$  1168 from Kambaidam; six from Degabaga, 8 miles east of Hagen Range, Sepik-Wahgi Divide,  $\eth$  1648, 1651, 1650, juv.  $\eth$  1649,  $\wp$  1653, 1652; four from Junzaing, Huon Peninsula,  $\eth$  1655, 1654,  $\wp$  1656, 1657; two from Mendi, Bismarck Range,  $\eth$  1658,  $\wp$  1659; and three from eastern Papua: juv.  $\eth$  47.1283, Enaena, NE. slopes Mt. Simpson; juv.  $\eth$  47.1284,  $\wp$  47.1285, Boneno, Mt. Mura.

The difference in colour between the juvenile and adult pelage is clearly indicated in this series. That of the younger animals, especially No. 47.1283, is grey with a very light overwash of yellowish-brown; that of the adult is a bright yellowish-brown. The measurements indicate the amount of variability in the species.

Number	Sex	Head and body	Tail	Hind foot	Ear	Condylo-basal length	Zygomatic breadth	Nasals	Inter-orbital breadth	Palatal length	Anterior palatal foramina	$m^{1-3}$	m2 <sup>1</sup>
47.1285	Ŷ	129	178	23	15	30.4	18.9	11.2	4.4	16.4	4.9	5.7	2.5×1.9
50.1167	3	117	176	24	14	29.3	18.0	10.6	4.5	15.5	4.1	5.4	2.4×1.7
1168	3	125	175	24	15	30.7	17.5	11.1	4.4	16.4	3.8	5.6	$2.5 \times 1.7$
1648	3	130	182	24	15	30.9	17.5	11.8	4.6	16.3	3.7	5.2	2·3×1·6
1651	3	119	165	22.5	14	29.0	16.9	10.7	4.7	15.2	3.9	5.2	2·3×1·7
1650	3	114	177	23.5	13	29.4	16.4	10.9	4.8	15.7	3.9	5·1	$2 \cdot 2 \times 1 \cdot 6$
1653	Q4 Q4	127	176	23	14	30.6	17.6	11.3	4.8	16.2	3.9	4.9	2·2×1·6
1652	₽ P	114	164	23.5	14	28.6	16.4	10.1	4.6	15.0	3.9	5.0	2·3×1·6
1655	3	126	187	23	16	30.8	17.3	10.0	4.9	16.2	4.3	5.2	2.5×1.7
1654	3	125	178	23	16.2	31.0	18.1		4.7	16.2	4.4	5.2	2.5×1.8
1656	Ŷ	129	173	23	15	30.2	17.3	10.2	4.5	16.2	4.5	5.7	2·5×1·8
1657	Ŷ	128	177	23	16	31.2	18.3	10.8	4·1	16.9	4.2	5.4	2·5×1·7
1658	5	117	195	25	14	29.8	17.3		4.7	16.0	3.8	5.2	2·5×1·8
1659	Ŷ	115	210	25	14.2	30.8	17.5	10.0	4.7	16.8	4.1	5.2	2·5×1·8

Measurements in mm. (taken in the flesh):

### **Pogonomys mollipilosus** (Peters & Doria)\*

Mus mollipilosus Peters & Doria, 1881, Ann. Mus. Stor. nat. Genova, **36**: 698. Type locality: Katau, Oriomo River, Daru, S. New Guinea.

Thirty-one specimens. Eight from eastern Papua: 3 47.1252, 1253, 1255, juv.

\* See Tate, 1951: 280, for synonyms.

This series shows a tendency, which is particularly marked in the specimens from Yandara and Tomba, for the line of demarcation between the yellowish-brown dorsal pelage and white ventral pelage to become indistinct. This is completely so in No. 50.1660 where the colour of the dorsal pelage merges with that of the under-surface, which is yellowish-whitish-grey.

# Pogonomys sylvestris Thomas

Pogonomys sylvestris Thomas, 1920, Ann. Mag. Nat. Hist. 9: 534. Type locality: Rawlinson Mountains, New Guinea.

Thirty-five specimens. Twenty-three from NE. New Guinea: 347.1268, 1269, 1273, juv. 31270a, juv. 31274, 947.1270, 1270b, Baiyanka, SE. Bismarck Range; 350.162, Saiko, Bubu River; 350.1684, 1685, 1686, 950.1688, 1689, Yandara, Bismarck Range; 350.1693, 950.1690, 1691, Yanka, eastern slopes Hagen Range; 350.1695, 1694, 950.1696, [350.1697, juv. 950.1698 in spirit], Tomba, SW. slopes Hagen Range; 950.1692, Degabaga, 8 miles east Hagen Range, Sepik-Wahgi Divide; and twelve from eastern Papua: 347.1272a, 947.1271, 1272, Boneno, Mt. Mura; 347.1275, 1276, 1277, 1278, 1282a, 947.1279, 1280, 1281, 1282, Enaena, NE. slopes Mt. Simpson.

# Pogonomys fergussoniensis sp. n.

Type Locality: Taibutu, Faralulu district, West Fergusson Island.
 Type: Adult & 50.1175, collector's No. 424, 21 July 1935. Skin and skull.
 Paratype: & 50.1176, collector's No. 427 (skull only), Taibutu, Faralulu district, West Fergusson Island.

These specimens are most nearly allied to *P. mollipilosus*. They are larger. The general colour is a rusty brown and there is no sharp line of demarcation between the dorsal and ventral pelage. Dorsally the pelage consists of grey based hairs with russet tips, and longer fuscous hairs. Ventrally the pelage is whitish-buff with patches of rust-coloured hairs. The hairs on the fore and hind feet are buff and there is a band of dark hairs on the upper side of the wrists. Tail fuscous with light patches. Ears fuscous.

Skull larger and more heavily built than that of *mollipilosus*; temporal ridges prominent.

Measurements in mm. of the type and paratype (taken in the flesh):

Number	Sex	Head and body	Tail	Hind foot	Ear	Condylo-basal length	Zygomatic breadth	Nasals, length	Inter-orbital breadth	Diastema	Palatal length	Palatal foramina	111-3 11-3	m1
50.1175 Type	5050	167	249	29	15	37·7	22·8	14·0	4·9	10•б	20·5	4·5	7·3	3·5×2·4
1176		—	—	—	—	35·0	20·7	12·5	3·9	10•2	19·3	4·4	7·3	3·5×2·4

# Pogonomys forbesi (Thomas)

Chiruromys forbesi Thomas, 1888, Proc. Zool. Soc. Lond. 1888: 239. Type locality: Sogere, SE. New Guinea.

Chiruromys pulcher Thomas, 1895, Novit. Zool. 2: 164.

Type locality: Fergusson Island, D'Entrecasteaux group. (Status fide Rümmler.)

Pogonomys forbesi vulturnus Thomas, 1920, Ann. Mag. Nat. Hist. 9: 535.

Type locality: Milne Bay, SE. Papua.

Pogonomys forbesi mambatus Thomas, 1920, Ann. Mag. Nat. Hist. 9: 536.

Type locality: Kokoda, Mambare River, NE. New Guinea.

Pogonomys (Chiruromys) forbesi satisfactus Tate & Archbold, 1935, Amer. Mus. Novit., No. 803: 7.

Type locality: Goodenough Island, D'Entrecasteaux group.

Pogonomys (Chiruromys) pulcher major Tate & Archbold, 1935, Amer. Mus. Novit., No. 803:8. Type locality: Goodenough Island, D'Entrecasteaux group. (Status fide Rümmler.)

Eight specimens. Four from Garaina, Upper Waria River, NE. New Guinea: 350.1163, 1164, 91165, 1166; and four from Wapona, north slope Manaeo Range (35 miles NW. Mt. Simpson), eastern Papua: 347.1264, 91265, 1266, juv. 91266a.

### Pogonomys lamia Thomas

Pogonomys lamia Thomas, 1897, Ann. Mus. Stor. nat. Genova, 38: 615. Type locality: Ighibirei, Upper Kemp Welch River, Central British New Guinea.

Eight specimens, all from eastern Papua: 347.1258, 1259, 1260, Enaena, NE. slopes Mt. Simpson; 31261, 1267 juv. of 21262, 1262*a*, 21262, Boneno, Mt. Mura; 31263, Ikara, NE. ridge Mt. Simpson.

### Pogonomys shawmayeri sp. n.

Type locality: Taibutu, Faralulu district, West Fergusson Island, 900 ft.
Type: Adult & 50.1177, collector's No. 419, 17 July 1935. Skin and skull.
Paratype: ♀ 50.1178, collector's No. 420, Taibutu, Faralulu district, West Fergusson Island, 900 ft.

These specimens appear to be closely related to *Chiruromys pulcher* Thomas, 1895, type locality Fergusson Island, which Rümmler (1938) describes as a synonym of *forbesi*. They are, however, larger, particularly when compared with the specimens, in this collection, of *forbesi* from the mainland and are at once distinguished by the

### IN NEW GUINEA, 1932-1949

much thicker tail which is covered with coarse brownish-black scales. As in the type of pulcher the fur is longer and softer than that of typical forbesi, the hairs in the middle of the back being about 15 mm. long. The general colour, however, is very similar to that of *forbesi*, a soft rufous brown instead of the reddish colour of *pulcher*, and the underside is creamy white instead of russet. There is a dark band running from the sides of the muzzle which joins the dark ring round the eye. The feet and hands are whitish. The tail has coarse scales which are all keeled and almost black in colour; in *pulcher* they are brown and only some are keeled. The skull is fairly similar to that of the types of *pulcher* and *forbesi*, the most noticeable difference being the somewhat broader brain-case (mastoidal breadth 16.2 mm. and c. 16.0 mm. in shawmayeri; 15.3 mm. in type of pulcher; 14.0 mm. in type of forbesi).

Measurements in mm. (taken in the flesh):

Number	Sex	Head and body	Tail	Hind foot	Ear	Condylo-basal length	Zygomatic breadth	Inter-orbital breadth	Nasals	Diastema	Palatal foramina	Palatal length	$m^{1-3}$	111 <sup>1</sup>
50.1177 Type 1178	<b>*o</b> 0∔	156 155	248 232	29 29	20·5 20·5	36.9	c.22·5 21·7	6·0 5·7	12·6×4·0 11·8×3·9	10.8 11.0	5·0 4·6	18.1 18.1	5·8 5·7	2.6×1.9 2.6×1.9

# Hyomys goliath goliath (Milne-Edwards)

Mus goliath Milne-Edwards, 1900, Bull. Mus. Hist. Nat., Paris, 6: 165. Type locality: Aroa River, British New Guinea, 3,000-7,000 ft. Hyomys meeki Thomas, 1903, Proc. Zool. Soc. Lond. 2: 198. Type locality: Avera, Aroa River, British New Guinea.

Fifteen specimens, all from NE. New Guinea: 950.1179, Kuraka, Kratke Mts.; 31180, 1181, juv. & 1183, juv. & 1182, Q 1184, Buntibasa district, Kratke Mts.; & 1185, 1186, Arau district, Kratke Mts.; juv. 9 1187, Saiko, and 3 1188, Bubu River district; 9 1189, 1190, Zageheme, Cromwell Mts., Huon Peninsula [in spirit]; 3 1681, ♀ 1682, Yanka, eastern slopes Hagen Range; juv. ♀ 1683, Menebe, 8 miles east of Hagen Range, Sepik-Wahgi Divide.

# Mallomys rothschildi Thomas subsp.

Range: New Guinea and (?) Flores.

Forty-eight specimens. Thirteen from eastern Papua: young ad. 347.1344, ♀ 1345, 1346, 1347, Boneno, Mt. Mura; young ad. ♀ 1341, Ikara. NE. slopes Mt. Simpson; & 1349, 1350, young ad. & 1348, \$\overline\$1352, 1353, 1355, young ad. \$\overline\$1354, juv. 91351, Enaena. NE. ridge Mt. Simpson; and thirty-five from NE. New Guinea: ở 50.1193, 1194, 1195, juv. ở 1196, ♀ 1197, 1198, Saiko, Bubu River; ♂ 1192, Buntibasa district, Kratke Mts.; ♀ 1191, Kuraka, Kratke Mts.; ♂ 47.1342, ♀ 47.1343, Tapu, Upper Ramu River Plateau; 3 47.1334, 1335, 1339, 9 47.1336, 1337, juv. ♀ 1338, young ad. ♀ 1340, Baiyanka, SE. Bismarck Range; ♂ 50.1780, 1781, 1782, Guyebi, Bismarck Range; ♂1784, 1785, 1786, 1787, juv. ♂1783, ♀1788, Yanka, eastern slopes Hagen Range; & 1789, 1790, \$1791, Tomba, SW. slopes Hagen Range; 200. I, IO SS

3 1792, 9 1793, 1794, 1795, Menebe, 8 miles east of Hagen Range, Sepik-Wahgi Divide ; & 1796, 91797, Degabaga, 8 miles east of Hagen Range, Sepik-Wahgi Divide.

This excellent collection of skins from a number of localities, ranging from the Hagen Range in the north to Mt. Simpson in the south, indicates that there is a great deal of variation in the colour and texture of the pelage of this species, from blackish and brownish-grey to dark brown. Both grey and brown forms occur together though the really dark brown specimens have so far only occurred in collections from the Bismarck and Hagen Ranges. Another variation in coat colour, which occurs in both grey and brown forms, is the presence of a band of white hairs across the middle of the underside which may go round on to the back (Nos. 50.1786, 50.1790 and 50.1791). Specimen No. 50.1789 has a few white hairs in the middle of its side. Measurements in mm. (taken in the flesh):

Locality	Number	Sex	Head and body	Tail	Hind foot	Ear	Condylo-basal length	Zygomatic breadth	Palatal length	Nasals	Anterior palatal foramina	₩1-3
Ikara, Mt. Simpson, eastern Papua	47.1341	y. ad. 9	363	380	70	29	_	_	_			_
Boneno, Mt. Mura, eastern Papua	47.1344 1345 1346 1347 (47.1349 1350	y. ad. 3 9 9 9 3	359 371 410 406 374 377	396 382 400 416 368 391	76.5 68 74 74 74 69 72	29 30 30 30 30 30	72·9 	36·4 	39 <sup>.</sup> 6 	29·7 	15·2 	17·0 
Enaena, Mt. Simpson, eastern Papua	1330 1348 1352 1353 1355 1354 (50.1193	♂ y. ad. ♂ ♀ y. ad. ♀ ♂	362 354 384 376 357 384	408 386 387 416 386 382	74 69 73 72 71 72	29 28 30 29 27 28·5	72·6 — — 75·9	40°0 — — 39°7	40·4 — — 42·4	28·8 — — 30·7	I5·3 — — I5·5	17·5
Saiko, Bubu River, NE. New Guinea	1194 1195 1197 1198	*0 *0 O+ O+	398 390 360 378	360 400 365 384	67.5 72 70 71	31 30 29 31	74.2	38.9	43.7	30·4	15·3	17·4
Buntibasa district, Kratke Mts. NE. New Guinea Kuraka, NE. New Guinea Tapu, Upper Ramu River Plateau,	50.1192 50.1191 \$ 47.1342	5 9 5	346 368 378	416 375 350	70 67 68	28 27.5 27	-	-	-	-	-	_
NE. New Guinea Baiyanka, Bismarck Range, NE. New	1343 47.1334* 1335*	04 °0 °0	322 391 370	335 395 382	65 70 66	27 30 30	73·9 70·3	37°4 38°1	41·4 40·0	29·8 27·0	14·6 14·1	 17·7 17·0
Guinea	1339 1336* 1337* 1340	ର ଦୁ y. ad. ଦୁ	375 357 376 374	295† 413 410 394	74 70 70 73	27 30 30 28	71.0 71.9	36·0 38·1	39·8 40·1	28·7 27·4	13·6 14·1	16.6 17.1
Guyebi, Bismarck Range, NE. New Guinea	50.1780* 1781 1782 50.1784*	0°0°0	367 360 376 384	380 394 364 400	68 73 70 70	28 30 29•5 30	71.5	39.4		28.0		
Yanka, Hagen Range, NE. New Guinea	1785* 1786* 1787* 1788	*0 *0 *0 O+	364 353 365 406	396 354 382 353	68 70 71 71	29 30 30 33	71·1 —	37.0	40.5	29°4 —	 	17.0 
Tomba, Hagen Range, NE. New Guinea	{ 50.1789* 1790* 1791 ( 50.1792*	°° +0 °° °	355 369 344 350	385 337 348 380	70 68 68 68	31 29 29 28	70·I 	36·4 36·7	39·4 39·6	27·9 	13·9 	17·5 
Menebe, Nr. Hagen Range, NE. New Guinea Degabaga, 8 miles east of Hagen	1793 1794 1795 (1796	0+ 0+ 0+ <b>*</b> 0	372 401 385 389	355 408 405 373	71 76 71 71.5	31 29 27 27	75.2	40.7	44·I	33 <sup>.9</sup>	I4.5 — —	17·8 — —
Range, Sepik-Wahgi Divide, NE. New Guinea	1797	Ŷ	363	373	69	26	-	-	-	-	-	_
*	Dark brown	specimens.			+ 3	ip brok	ken off.					

Dark brown specimens.

## Rattus exulans exulans (Peale)

Mus exulans Peale, 1848, U.S. Exploring Expedition. . . . 1838-42. Under the command of C. Wilkes, 8: 47, Philadephia. Type locality: Fiji Isands.

Three specimens from Tongoa Island, New Hebrides: 3 50.1200, juv. 9 50.1201 skull only, ?50.1202 skull only.

# Rattus exulans browni (Alston)

Mus browni Alston, 1877, Proc. Zool. Soc. Lond. 1877: 123. Type locality: Duke of York Island. Mus echimyoides Ramsay, 1877, Proc. Linn. Soc. N.S.W. 2: 15. Type locality: Duke of York Island.

Nineteen specimens. Fourteen from NE. New Guinea: 350.1205, 1206, Kambaidam, Kratke Mts.; 347.1131, 1132, 1133, 947.1134, Tapu, Upper Ramu River Plateau; 947.1135, Baiyanka, SE. Bismarck Range; 350.1751, 1752, 1753, 1754, 1755, 950.1756, 1757, Yandara, Bismarck Range; three from eastern Papua: 347.1138, Ikara, NE. slopes Mt. Simpson; 347.1139, 947.1140, Boneno, Mt. Mura; and two, 347.1136, 947.1137, from Lau, Bainings Mts., Gazelle Peninsula, New Britain.

# Rattus ruber tramitius Thomas

Rattus mordax tramitius Thomas, 1922, Ann. Mag. Nat. Hist. 9: 262.

Type locality: Mamberano-Idenburg region (Doormanpad-bivak), N. Dutch New Guinea. Rattus leucopus utakwa Rümmler, 1935, Z. Säugertierk. 10: 115.

Type locality: Camp No. 3, Utakwa River, 2,000 ft.

Rattus mordax hageni Troughton, 1937, Rec. Aust. Mus. 20: 120.

Type locality: Upper Wahgi River, south slopes of Mt. Hagen, south of Sepik Division, New Guinea.

Nineteen specimens. Seventeen from NE. New Guinea: three, 3 50.1208, 1209, 9 1210, from Saiko, Bubu River; twelve, 3 1737, 1738, 1740, 1741, 1742, 1739, 9 1748, 1746, 1747, 1743, 1745, 1744, from Yandara, Bismarck Range; two, 3 1749, 9 1750, from Yanka, eastern slopes Hagen Range; and two from eastern Papua: 9 47.1156, Enaena, NE. slopes Mt. Simpson; 9 47.1159, Boneno, Mt. Mura.

Tate (1951: 331, 333) suggests that *Rattus ruber hageni* from the Mt. Hagen area, north-east New Guinea, is possibly the same as *R. ruber tramitius* from the mountains south of the Idenburg River, north Netherlands New Guinea, with which *utakwa* from south-west Netherlands New Guinea is synonymized. Two of the nineteen specimens in this collection came from the eastern slopes of Mt. Hagen; twelve from the neighbouring Bismarck Range; three from the Bubu River (Upper Warai River), south-eastern north-east New Guinea; one from Mt. Mura; and one from Mt. Simpson, eastern Papua. The general colour of the specimens varies from the 'buffyochraceous' of the type of *hageni* to the 'blackish-grey very finely ticked with buffy' of the type of *tramitius*, and the range of the measurements of the skins and skulls includes those of *tramitius* and *hageni*, so that it is impossible to separate the two. Tate (1951: 333) states that the mammary formula of *hageni* is unknown and that therefore it may be a race of *verecundus* or *leucopus*. But Troughton in his description of the type gives the mammary formula as 2-2=8.

The following are the measurements of the skins of six adult males and ten adult females, and of the skulls of seven adult males and six adult females, of *tramitius*.

		Extre	mes	Ave	rage	Standard deviation		
	3	Ŷ	3	Ŷ	5	Ŷ		
Head and body		152-175	135-172	162	152	7.8	9.2	
Tail		133-155	127-153	144	135	9.2	7.5	
Hind foot		32-35	30-34	34	32	1.3	1.6	
Ear		19-21.5	18-21	19.8	19	I·2	I•2	
Condylo-basal length		37-39.3	34.9-39.6	38.7	37.2	I.0	1.2	
Zygomatic breadth		18.3-21.4	18.7-21.2	19.7	19.9	I.0	I•0	
Inter-orbital breadth		5.8-6.1	5.6-6.2	5.9	5.9	0.1	0.2	
m <sup>1-3</sup>		6.6-7.3	6.7-7.4	7.0	7.1	0.3	0.3	
$m^{I}$ length		3.2-3.9	3.1-3.6	3.2	3.4	0.3	0.5	
$m^{I}$ breadth		2.1-2.6	2.1-2.6	2.3	2.3	0.5	0.2	

# Rattus ruber fergussoniensis subsp. n.

Type locality: Faralulu district, West Fergusson Island, SE. New Guinea, c. 900 ft. Type: Adult & 50.1211, collector's No. 436, 31 July 1935. Skin and skull.

Paratype: 950.1212, collector's No. 441, skull only, Faralulu district, West Fergusson Island, SE. New Guinea, c. 900 ft.

This short-tailed rat is most closely related to R. ringens feliceus (Ellerman, 1949) and R. ringens coenorum (? = bandiculus). Its size, proportionate length of tail to body, and the size of the scales on the tail (6–7 rings per cm.) make it very similar to feliceus. The general colour, however, is much darker and is similar to that of coenorum, a grizzled brownish-grey, only it is suffused with russet. This colour occurs in irregular streaks on the sides and under surface which is otherwise buffy grey.

The skull is not quite as large as, but is most closely allied to, that of the type of *bandiculus*, which may be synonymous with *coenorum* (see Tate, 1951, p. 332). The palatal foramina are straighter and narrower and the molar teeth are arranged in a slight curve instead of in the straight almost parallel lines of *coenorum*.

Measurements in mm. of the type and paratype (taken in the flesh):

Number	Sex	Head and body	Tail	Hind foot	Ear	Condylo-basal length	Zygomatic breadth	Nasals	Inter-orbital breadth	Diastema	Palatal length	Palatal foramina	918 <sup>1-3</sup>	ml
50.1211 Type 1212	<b>*</b> 0 0	225	194	41	22	50 46·9	25·3 25·0	19·5×6·2 19·0×5·2	6-8 7-0	3*4 2*3	28.7 27.7	9·6 8·6	8·9 8·6	4·3×2·5 4·0×2·5

#### Rattus ruber rosalinda Hinton

Rattus rosalinda Hinton, 1943, Ann. Mag. Nat. Hist. 10: 557. Type locality: Tapu, Upper Ramu River Plateau, NE. New Guinea.

One additional specimen, 950.1207 from Kambaidam, Kratke Mts., NE. New Guinea, to the eight specimens which include the type from Tapu, NE. New Guinea.

#### Rattus niobe haymani Ellerman

Stenomys klossi Thomas, 1913, Ann. Mag. Nat. Hist. 12: 207 (preoccupied).

Type locality: Upper Utakwa River, Dutch New Guinea, 5,500 ft.

Rattus niobe haymani Ellerman, 1941, The families and genera of living rodents, 2: 206 (new name).

One specimen, 3 50.1765, from Yanka, eastern slopes Hagen Range, Central Highlands, NE. New Guinea.

#### Rattus verecundus tomba subsp. n.

*Type locality*: Tomba, SW. slopes Hagen Range, Central Highlands, NE. New Guinea, 8,500 ft.

Type: Adult 3 50.1766, collector's No. 1093, 27 June 1947. Skin and skull.

This specimen seems to be most nearly allied to R. v. mollis Rümmler, 1935, from Morobe, Mt. Misim, Papua, 5,850 ft. It is smaller than R. v. verecundus. The pelage is fine, long and soft, and the hairs on the back, which are about 6 mm. long, are dark grey tipped with yellowish-brown. On the under surface they are slate-grey tipped with white; a few are tipped with yellow. The feet and hands are white and there is a white spot on the chest. The tail is covered with short fine yellowishbrown hairs except for about 42 mm. at the tip where the hairs are white.

The skull is smaller and lighter than that of R. v. verecundus; the temporal ridge is barely visible; and the anterior palatal foramina are pointed at both ends, not more rounded posteriorly as in R. v. verecundus.

Measurements in mm. of the type (taken in the flesh):

Number	Sex	Head and body	Tail	Hind foot	Ear	Condylo-basal length	Palatal length	Zygomatic breadth	Nasals, length	Inter-orbital breadth	Diastema	Palatal foramina	Bulla length	m13
50.1766 Type	б	136	146	32	19	32.3	18.4	16.4	13.3	5.9	9.0	5.6×2.7	5.0	5.8

#### Rattus shawmayeri Hinton

Rattus shawmayeri Hinton, 1943, Ann. Mag. Nat. Hist. 10: 556. Type locality: Baiyanka, Purari-Ramu Divide, SE. Bismarck Range, NE. New Guinea.

Eight specimens all from NE. New Guinea: 350.1763, 91764, duplicate collector's No. 1143 (skull and piece of skin), high slopes Mt. Wilhelm, Bismarck Range; 31758, Yandara, Bismarck Range; 31762, Bogo, south slopes Bismarck Range; 31761, 1760, Tomba, SW. slopes Hagen Range; 91759, Yanka, eastern slopes Hagen Range.

These specimens are a useful addition to our collection in which, so far, the type of the species has been the only representative.

Measurements in mm. (taken in the flesh):

Number	Sex	Head and body	Tail	Hind foot	Ear	Condylo-basal length	Zygomatic breadth	Nasals, length	Inter-orbital breadth	Palatal length	Anterior palatal fossa	Diastema	m1-3	m <sup>1</sup> breadth
50.1763	3	103	158	23	18	26.9	15.6	9.9	4.3	14.0	4.6	7.0	4.2	1.3
1764	₽ 🖓	99	159	23	16.2	25.6	15.9	9.9	4.3	13.2	4.6	7.0	4.3	1.3
1758	8	101	168	24	17.2	27.0	16.1	10.4	4.4	14.6	5.2	7.8	4.0	1.5
1762	8	100	146	24	16.2	26.2	15.7	9.9	4.2	13.8	5.0	7.3	4.3	1.3
1761	8	107	158	24	19	27.2	16.3	9.9	4.3	14.2	4.5	7.3	4.2	1.3
1760	8	104	150	24.5	18	26.0	15.3	9.8	4.5	13.8	4.7	7.2	4.3	1.3
1759	Ŷ	114	155	25	19	27.4	16-2	10.3	4.7	14.8	5.4	8.2	4.3	1.3

#### Melomys levipes clarae (Rümmler)

Melomys levipes clarae Rümmler, 1935, Z. Säugertierk. 10: 108. Type locality: Sumuri Mountain, Weyland Mountains, 2,000 ft.

Two specimens both from NE. New Guinea: 3 50.1715, Degabaga, 8 miles east Hagen Range, Sepik-Wahgi Divide; 9 1716, Menebe, 8 miles east Hagen Range, Sepik-Wahgi Divide.

These extend the range of *clarae* to NE. New Guinea and to an altitude of 4,500-6,000 ft. The type of *M*. *l. weylandi* was taken at 5,000 ft. but the measurements of the skulls of these specimens agree with those of the type of *clarae*.

# Melomys levipes subsp.

Thirteen specimens identified by Ellerman as a subspecies of *M. levipes*. Eleven from NE. New Guinea: 347.1202, 1203, 1204, 1205, 1206, 1207, 91208, 1209, 1210, 1211, 1211*a*, Baiyanka, SE. Bismarck Range; and two from eastern Papua, 31212, Enaena, Mt. Simpson; 91213, Ikara, NE. ridge Mt. Simpson.

Measurements in mm. (taken in the flesh):

Number	Sex	Head and body	Tail	Hind foot	Ear	Condylo-basal length	Zygomatic breadth	Nasals, length	Inter-orbital breadth	Palatal length	Anterior palatal foramina	318-13	ml
47.1202	8	156	158	35	20	35.4	17.5	14.3	6.4	19.9	6.3	8.0	3.8×2.3
1203	ð	150	153	35.2	20	35.7	17.4	14.8	6.6	20.0	6.3	8.0	3.8×2.2
1204	ð	157	160	35	20	36.6	17.3	15.1	6.6	20.9	6.5	7.3	3.8×2.3
1205	δ	157	156	35	20	34.5	17.9	13.8	7.0	19.0	6.0	7.8	3.9×2.4
1206	5	154	156	35	21	35.7	17.9	15.3	6.9	20.0	5.7	7.9	3.8×2.3
1207	ð	153	156	35	19	35.6	17.8	14.8	6.8	20.4	6.5	7.9	3.9×2.3
1208	Ŷ	146	140	33.5	19	34.2	17.9	13.9	6.6	19.4	6.7	7.8	3.9×2.3
1209	0 <del>1</del> 0 <del>1</del>	159	166	36	20	35.7	17.7	14.3	6.7	20.0	6.2	7.9	3.9×2.4
1210	Ŷ	152	144	35	19.5	35.3	17.9	14.5	6.5	20.0	6·1	7.9	3.8×2.4
1211	Ŷ	150	153	35	21	34.7	17.4	15.0	6.6	19.2	6.0	8.1	4.0×2.4
12114	Ŷ	144	144	35.5	19	35.8	17.0	13.8	6•5	19.0	6.0	7.8	3.8×2.3

#### Melomys moncktoni moncktoni (Thomas)

Uromys moncktoni Thomas, 1904, Ann. Mag. Nat. Hist. 14: 399. Type locality: NE. New Guinea.

Six specimens, all from NE. New Guinea: 350.1709, 1710, 91711, 1712, high northern slopes Mt. Wilhelm, Bismarck Range; 31713, Yandara, Bismarck Range; 91714, Yanka, eastern slopes Hagen Range.

#### Melomys lutillus lutillus (Thomas)

Uromys lutillus Thomas, 1913, Ann. Mag. Nat. Hist. 12: 216. Type locality: Owagarra, Angabunga River, Central Division, Papua.

One specimen, 947.1214, from Enaena, NE. slopes Mt. Simpson, eastern Papua.

#### Melomys rufescens rufescens (Alston)

Uromys rufescens Alston, 1877, Proc. Zool. Soc. Lond. 1877: 124. Type locality: Duke of York Island, between New Britain and New Ireland. Mus musavora Ramsay, 1877, Proc. Linn. Soc. N.S.W. 2: 16.

Type locality: Duke of York Island.

Twenty-six specimens. Fourteen from NE. New Guinea: 347.1193, 1195, 1196, juv. 3194, 91197, 1198, 1198*a*, Tapu, Upper Ramu River Plateau; 347.1199, 91200, 1201, Baiyanka, SE. Bismarck Range; 950.1213, Kambaidam, Kratke Mts.; 950.1701, Yandara, Bismarck Range; 950.1700, Yanka, eastern slopes Hagen Range; 350.1699, Tomba, SW. slopes Hagen Range; and twelve from eastern Papua: 347.1184, 1185, 1186, 1187, juv. 31183, 91188, 1189, 1190, 1190*a*, 1190*b*, 1191, 1192, Enaena, Mt. Simpson.

#### Melomys rufescens dollmani Rümmler

Melomys rufescens dollmani Rümmler, 1935., Z. Säugetierk. 10: 106. Type locality: Buntibasa district, Kratke Mts., NE. New Guinea.

Four specimens, all from NE. New Guinea: one 347.1215, from Tapu, Upper Ramu River Plateau, and three 9950.1718, 1719, 1717, from Tomba, SW. slopes Hagen Range.

Number	Sex	Head and body	Tail	Hind foot	Ear	Condylo-basal length	Zygomatic breadth	Nasals, length	Inter-orbital breadth	Palatal length	Anterior palatal foramina	111-3 mi-1	<b>3</b> 1.1
47.1215	3	130	184	28	18	31.1	16.2	10.0	5.7	16.1	4.6	5.9	2·9×1·9
50.1718	Ŷ	I 34	175	29	17.5	31.6	17.2	10.2	5.5	16.6	4.5	6.3	3.0 X I.9
1719	Ŷ	141	191	29	18	31.6	16.2	11.4	5.5	16.4	4.2	6.0	3.0 × 1.9
1717	Ŷ	144	156*	29.5	18	32.3	18.0	11.2	5.8	17.2	4.6	6 <b>·</b> 1	3.0 × 1.9

Measurements in mm. (taken in the flesh):

\* Tip broken )1.

#### Melomys fellowsi Hinton

Melomys fellowsi Hinton, 1943, Ann. Mag. Nat. Hist. 10: 554. Type locality: Baiyanka, SE. Bismarck Range, NE. New Guinea, 8,000.

Seventeen specimens, all from NE. New Guinea ; type 3 47.1175, paratypes 3 1174, 1176, 1177, 9 1178, 1179, 1180, 1181, juv. 9 1181*a*, [? 1182 in spirit], Baiyanka, SE. Bismarck Range ; 9 50.1704, Yandara, Bismarck Range ; 9 50.1705, 1706, high northern slopes Mt. Wilhelm, Bismarck Range ; 9 50.1707, [3 1708 in spirit], Tomba, SW. slopes Hagen Range ; 3 50.1702, 9 1703, Yanka, eastern slopes Hagen Range.

The first ten specimens were mentioned by Hinton in 1943 when describing the type. The other specimens are all very similar to these.

#### Pogonomelomys sevia tatei Hinton

Pogonomelomys tatei Hinton, 1943, Ann. Mag. Nat. Hist. 10: 554.

Type locality: Baiyanka, Purari-Ramu Divide, SE. Bismarck Range, NE. New Guinea, 8,000 ft.

Eight adult specimens, all from NE. New Guinea: seven from Tomba, SW. slopes Hagen Range, 350.1721, 1720, 91722, 1723, 1724, [31725, 91726 in spirit], and one from the high northern slopes of Mt. Wilhelm, Bismarck Range, 91727.

These are a useful addition to our collection which only contained the type and two young paratypes. The general colour of all six specimens is a rich reddish-brown. This is the colour of the adult pelage; that of the young specimens is much greyer.

Number	Sex ,	Head and body	Tail	Hind foot	Ear	Condylo-basal length	Zygomatic breadth	Nasals, length	Inter-orbital breadth	Diastema	Palatal length	Palatal foramina	m <sup>1-3</sup>	m1
50.1721	8	135	173	25	17.5	33.2	19.3	11.2	6.0	9.3	17.6	6.2	6.5	3.0× 1.7
1720	ð	135	166	25	18	31.6	18.2	C. 12.0	5.3	8.4	16.2	5.6	6.4	2.0×1.8
1722	Ŷ	138	183	25	18	32.8	18.2	11.7	5.0	8.7	17.3	5.2	6·1	2.8×1.8
1723	Ŷ	128	172	25	18	30.8	17.9	9.8	5.3	8.5	16.0	5.3	6.0	2.8×1.7
1724	Ŷ	I 20	180	24	18	30.5	17.7	11.1	4.9	8.4	16.1	5.4	6.3	3.0×1.8
1727	Ŷ	127	184	24	17	30.6	18.1	11.4	5.9	8.5	16.5	5.5	6.2	2.8×1.7
1725	8						18.0	11.0	5.7	8.8	17.0	5.2	6.5	3.0×1.7
1726	Ŷ				—	31.6	17.3	11.1	5.2	8.6	16.6	5.8	6.0	2·8×1·7

Measurements in mm. (taken in the flesh):

#### Uromys anak Thomas

Uromys anak Thomas, 1907, Ann. Mag. Nat. Hist. **20:** 72. Type locality: Ifogi, Brown River, NE. Papua,  $\pm$  4,000 ft. Uromys rothschildi Thomas, 1912, Nov. Zool. **19:** 91. Type locality: Rawlinson Mts., Huon Peninsula, New Guinea.

Nine specimens all from NE. New Guinea: 3 50.1227, 9 1228, Buntibasa district, Kratke Mts.; 3 1229, Kuraka, Kratke Mts.; 9 1232 skull only, Apimuri, Kratke Mts.; 3 1230, 1231, Saiko, Bubu River; 3 1676, juv. 3 1675, Degabaga, 8 miles east of Hagen Range, Sepik-Wahgi Divide; 3 1677, Menebe, 8 miles east Hagen Range, Sepik-Wahgi Divide.

# Uromys caudimaculatus aruensis Gray

Ilvomus aruensis Grav 1873 Ann Mag. Nat. Hist 12: 418

oromys writerists cray, 10/3, 11/10. 11/06. 11/00. 10. 410.
Type locality: Aru Islands.
Uromys validus Peters and Doria, 1881, Ann. Mus. Stor. nat. Genova, 36: 703.
Type locality: Katau, mouth of Fly River, Papua.
Hapalotis papuanus Ramsay, 1883, Proc. Linn. Soc., N.S.W. 8: 18.
Type locality: New Guinea.
Uromys nero Thomas, 1913, Ann. Mag. Nat. Hist. 12: 208.
Type locality: Camp No. 3, Utakwa River, Dutch New Guinea, 2,500 ft.
Uromys scaphax Thomas, 1913, Ann. Mag. Nat. Hist. 12: 209.
Type locality: Canoe Camp, lower Setakwa River, Dutch New Guinea, 150 ft.
Uromys prolixus Thomas, 1913, Ann. Mag. Nat. Hist. 12: 213.
Type locality: Haveri, Astrolabe Range, Papua, 2,000 ft.
Uromys ductor Thomas, 1913, Ann. Mag. Nat. Hist. 12: 213.
Type locality: Avera, Aroa River, Papua.

Uromys siebersi Thomas, 1923, Treubia, **3**: 422. Type locality: Gunung Daab, Great Kei Island.

Nine specimens all from NE. New Guinea. Six from the Kratke Mts.: 3 50.1233,

 $\bigcirc$  1234, Buntibasa district;  $\Huge{3}$  1236, Apimuri;  $\Huge{3}$  1235, skull only 1238, Kambaidam;  $\Huge{9}$  1237, Sasara; and three  $\Huge{3}$  1678, 1679, 1680 from Degabaga, 8 miles east of Hagen

Range, Sepik-Wahgi Divide.

# Macruromys major Rümmler

*Macruromys major* Rümmler, 1935, *Z. Säugetierk*. **10**: 105. Type locality: Buntibasa district, Kratke Mts., NE. New Guinea, 4,000–5,000 ft.

Three specimens, all from NE. New Guinea: 3 50.1249, Saiko, Bubu River; 3 1250, Yampara, Kratke Mts.; paratype 1251 skull only, Buntibasa district, Kratke Mts.

# Lorentzimys alticola Tate & Archbold

Lorentzimys nouhuysii alticola Tate & Archbold, 1941, Amer. Mus. Novit., No. 1101: 4. Type locality: Nr. Lake Habema, Mt. Wilhelmina, Dutch New Guinea, 2,700 m.

Eleven specimens. Six from NE. New Guinea:  $\bigcirc$  47.1295, Baiyanka, SE. Bismarck Range;  $\eth$  50.1730,  $\bigcirc$  1732, juv.  $\bigcirc$  1731, Yandara, high slopes Mt. Wilhelm;  $\eth$  50.1728,  $\bigcirc$  1729, high northern slopes Mt. Wilhelm, Bismarck Range; and five in alcohol from eastern Papua:  $\eth$  47.1296, 1298, juv.  $\eth$  1297,  $\heartsuit$  1299, ? 1300, Enaena, Mount Simpson.

The specimens from Baiyanka and Enaena were the first representatives of this genus to be received in London (Ellerman, 1949). The additional five specimens are very similar to these.

#### **Parahydromys asper** (Thomas)

Limnomys asper Thomas, 1906, Ann. Mag. Nat. Hist. 17: 326.

Type locality: Mt. Gayata, Richardson Range, British New Guinea.

Parahydromys Poche, 1906 (June), Zool. Anz. 30: 326 (to replace Limnomys Thomas).

Drosomys Thomas, 1906 (December), Proc. Biol. Soc. Washington, 19: 199 (to replace Limnomys Thomas).

Fifteen specimens, all from NE. New Guinea: 3 50.1240, 1241, 1242, 1243, Buntibasa district, Kratke Mts.; 3 1244, 1245, Arau district, Kratke Mts.; juv. 3 1246,

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1247 (skull only), Kuraka, Kratke Mts.; 3 1248, Saiko, Bubu River; 3 1669 (skin only), juv. 9 1670, Yanka, eastern slopes Hagen Range; juv. 3 1671, Menebe, 8 miles east Hagen Range, Sepik-Wahgi Divide; 3 1672, Degabaga, 8 miles east Hagen Range, Sepik-Wahgi Divide; 9 1673, [juv. 9 1674 in spirit], Tomba, SW. slopes Hagen Range.

# Crossomys moncktoni Thomas

Crossomys moncktoni Thomas, 1907, Ann. Mag. Nat. Hist. 20: 72. Type locality: Serigina, Brown River, NE. Papua, 4,500 ft.

Fourteen specimens all from NE. New Guinea: 350.1239, Arau, Kratke Mts.; 31768, 1767, 91772, 1773, 1769, 1774, 1775, 1771, 1770, Baiyer River, east slope Hagen Range; 31776, Tomba, SW. slopes Hagen Range; 31777, 91778, 1779, Yandara, Bismarck Range. These are additional to the five specimens from Baiyanka mentioned by Ellerman (1949).

# Leptomys elegans ernstmayri Rümmler

Leptomys ernstmayri Rümmler, 1932, Das Aquarium 6: 131, 135.

Type locality: Ogeramnang, Saruwaged Mts., Huon Peninsula, NE. New Guinea.

Five specimens all from NE. New Guinea, 3 50.1252, 1254 (skull only), Q 1253, 1255 (skull only), Kambaidam, Kratke Mts.; 3 1256, Arau district, Kratke Mts.

#### Pseudohydromys murinus Rümmler

Pseudohydromys murinus Rümmler, 1934, Z. Sāugetierk. 9: 48. Type locality: Morobe, Mt. Misim, NE. New Guinea, 7,000 ft.

Three specimens, all from NE. New Guinea: 350.1733, collector's No. 1136, Yandara, high slopes Mt. Wilhelm; 91734, collector's No. 1146, 1735, collector's No. 1151, high northern slopes Mt. Wilhelm, Bismarck Range.

These three specimens are new to our collection and appear to be the first specimens recorded since the type was described. The pelage agrees with the description of that of the type except that in No. 1734 it is a little shorter and greyer and in this same specimen the tip of the otherwise brown tail is white. The measurements also agree fairly well with those of the type and with the remeasurements by Tate (1951) which show that the length of the nasals is  $8 \cdot 0$  mm. not 13.0 mm. as given by Rümmler.

These specimens extend the range of this species some 200 miles to the north-west of its type locality and to an altitude of 9,000–10,000 ft.

Palatal foramina Condylo-basal length and body length Palatal length Inter-orbital breadth Zygomatic breadth foot Diastema Nasals, Number Head Hind Tail  $m^{1-2}$ Ear Sex 10000 88 22.8 50.1733 91 19 9 10.6 11.0 4.7 5.7 2.1 7.7 3.1 × 1.1 103 10.8 8.0 2.8×0.9 1734 91 20 10 11.3 6.0 2·1 4.5 4.8 1735 105 19.5 12 22.0 10.6 III 2.0 3.2×1.1 93 5.7

Measurements in mm. (taken in the flesh):

#### Neohydromys gen.

This is a small mouse-like Hydromyine, not modified for aquatic habits. It is distinguished from all other Hydromyinae, including *Microhydromys* which Tate & Archbold (1941) described as the smallest known Hydromyine, by having much smaller molar teeth, which are  $\frac{2}{2}$  as in most Hydromyinae, by its rather long muzzle which is short and broad in *Microhydromys* and by the large diastema which is larger than that of *Microhydromys*. The zygomatic plate is not so much excised in front as that of *Microhydromys*, and the upper incisor teeth are not grooved, a feature which appears to be unique to *Microhydromys*. The incisor teeth are, however, well developed and are slightly pro-odont, as are those of *Xeromys*. The bullae are rather similar to those of the type of *Microhydromys* (measurements of the type of *Microhydromys* are given in parentheses): width 2.9 mm. (2.9 mm.), length 4.0 mm. (3.8 mm.), distance apart 2.2 mm. (2.0 mm.). The palatal foramina are small as in *Pseudohydromys*, but the pterigoid and alisphenoid region is not swollen. The angular projection of the mandible is not so pronounced as in *Pseudohydromys*.

Type species: Neohydromys fuscus

# Neohydromys fuscus sp. n.

*Type locality*: High northern slopes Mt. Wilhelm, Bismarck Range, NE. New Guinea, 9,000–10,000 ft.

*Type*: Adult *Q* 50.1736, collector's No. 1185, 19 June 1949. Skin and skull.

In external appearance this small murid is very similar to *Pseudohydromys murinus*. (I have not seen a specimen of *Microhydromys richardsoni* with which it also appears to be very similar in external appearance.) The pelage, which is about 4 mm. long, is smoky grey in colour and only slightly lighter ventrally. The ears are the same colour as the body. The fore and hind feet are slender and lightly covered with short white hairs. The tail is brownish both above and below; according to the collector the terminal 16 mm. was white; there are 17 rings of scales per centimetre, and the fine silvery scale hairs are only about half the length of the scale. The skull is a little larger than that of *Pseudohydromys murinus* but is easily distinguished from it by the very small molars, the slightly pro-odont incisor teeth (upper ones pale orange with white tips, lower ones pale yellow), the longer muzzle and larger diastema, and the less excised zygomatic plate. *Neohydromys fuscus* is also distinct from *Pseudohydromys occidentalis* Tate (1951).

Measurements in mm. (taken in the flesh):

Skin: head and body 92; tail 78; hind foot 21; ear 12.

Skull: condylo-basal length 24·3; zygomatic breadth 12·3; palatal length 13·1; inter-orbital breadth 5·2; diastema 8·2; palatal foramina 2·0; nasals (length) 7·9; bullae, 4·0×2·9; distance apart of bullae, 2·0; palatal breadth between  $m^1-m^1$  2·6; length  $m^1+m^2$  2·1;  $m^1$  (length×breadth) 1·4×0·7;  $m^1$  (length× breadth) 0·7×0·6; mandible, greatest length (except incisors), 13.4;  $m_1 + m_2$ , 2·2.

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### CHIROPTERA

#### Pteropus sp.

One young 3 50.969 (skin only) from Fergusson Island.

#### Dobsonia moluccensis magna Thomas

Dobsonia magna Thomas, 1905, Ann. Mag. Nat. Hist. 16: 423.

Type locality: Tamata, Mambaré River, eastern New Guinea.

Dobsonia moluccensis magna Thomas, Andersen, 1912, Cat. Chiropt, Coll. Brit. Mus., 2nd ed., 1. Megachiroptera, 825, London.

Two specimens, 3 50.1149, 1150, Buntibasa district, Kratke Mts., NE. New Guinea.

#### Nyctimene papuanus Andersen

Nyctimene papuanus Andersen, 1910, Ann. Mag. Nat. Hist. 6: 621. Type locality: Milne Bay, eastern tip of New Guinea.

One specimen & 50.1153, Arau district, Kratke Mts., NE. New Guinea.

# Paranyctimene raptor Tate

Paranyctimene raptor Tate, 1942, Amer. Mus. Novit., No. 1204: 1. Type locality: Oroville Camp, Fly River, Papua.

Two specimens collected 12 January 1933 which are new to our collection: 350.1151, 91152 from the Arau district, Kratke Mts., NE. New Guinea.

I have not been able to compare these specimens with the type but they appear to be very similar to the description of it; they have no dorsal stripe. Some of their measurements are a little larger but those for the teeth agree closely with those of the type.

Measurements in mm. (taken in the flesh):

ләдит <u>N</u> 50.1151 1152	+004 Sex	& 2 Head and body	05 61 Tail	Hind foot	I Far	0 4	шльэло <u>Н</u> 55 55	5Lambda to5gnathion	+ + 0rbit to nares	10. Zygomatic	2	c. + Inter-orbital o i breadth	0.11 Width brain-case	5   Palatal length
Number		Length upper canine from alveolus	Width upper canine at cingulum	Cingulum length	of p <sup>3</sup>	Height p <sup>3</sup> above alveolus	Cingulum length of $p^4$	Height $p^{4}$ above alveolus	Height lower canine above alveolus	Width lower canine at cingulum	Height p <sub>3</sub> above alveolus	Cingulum length	y ra Height pa above alveolus	Cingulum length p.
50.1151 1152		4·8 4·7	1.3 1.3	I. I.		2·2 2·2	1.6 1.6	1.8 1.5	3·7 3·8	1·2 1·3	2.6 2.5	1.7 1.7		1.7 1.7

#### Syconycteris crassa papuana (Matschie)

Macroglossus (Syconycteris) papuanus Matschie, 1899, Die Fledermäuse des Berliner Museums f. Naturkunde, Megachiroptera: 99. Berlin.

Type locality: Andai, NW. New Guinea.

Syconycteris crassa papuana (Matschie), Andersen, 1912, Cat. Chiropt. Col. Brit. Mus., 2nd ed., 1. Megachiroptera, 777, London.

Six specimens. Five from NE. New Guinea: 350.1798, 1799, Yandara, Bismarck Range, 3970 [in spirit], Baiyanka, SE. Bismarck Range; 91800, Juzaing, Saruwaged Range, Huon Peninsula; 31801 [in spirit], Tomba, Hagen Range, and one juv. 9971 [in spirit], from Enaena, NE. slopes Mt. Simpson, eastern Papua.

The spirit specimen from Tomba differs from the others by its narrow teeth, and it has less hair on the forearm than in the average specimens.

#### Hipposideros muscinus muscinus (Thomas & Doria)

Phyllorhina muscina Thomas & Doria, 1886, Ann. Mus. Stor. nat. Genova, 24: 203. Type locality: Fly River, Papua.

Hipposideros muscinus muscinus (Thomas & Doria), Tate, 1946, Amer. Mus. Novit., No. 1323: 1-21.

Two specimens, ♂ 50.1154, ♀ 1155, Buntibasa district, Kratke Mts., NE. New Guinea.

## Philetor rohui Thomas

Philetor rohui Thomas, 1902, Ann. Mag. Nat. Hist. 9: 220. Type locality: Albert Edward Range, Papua, 6,000 ft.

Seven specimens in spirit: 3 50.972, 973, 9 974, 975 976, 977, 978 from Enaena, NE. slopes Mt. Simpson, eastern Papua.

### Pipistrellus collinus Thomas

Pipistrellus papuanus collinus Thomas, 1920, Ann. Mag. Nat. Hist. 9: 533. Type locality: Bihagi, head of Mambari River, Papua. Pipistrellus collinus Thomas, Tate, 1942, Bull. Amer. Mus. Nat. Hist. 80: 241.

One & 50.983 [in spirit], Baiyanka, SE. Bismarck Range, NE. New Guinea.

#### Miniopterus schreibersi blepotis (Temminck)

Vespertilio blepotis Temminck, 1841, Monographies de Mammalogie....2: 212. Paris & Amsterdam.

Type locality: Java-also Banda, Amboina, Timor, Japan.

Miniopterus schreibersii blepotis Temminck = medius = ravus = eschscholtzii = fuscus = yayeyamae) Tate, 1941, Bull. Amer. Mus. Nat. Hist. **78**: 567-597.

Two specimens,  $\bigcirc$  50.1802, 1803 [in spirit], Tomba, Hagen Range, NE. New Guinea.

#### Miniopterus schreibersi magnater Sanborn

Miniopterus schreibersi magnater Sanborn, 1913, Field Mus. Publ. Zool. 18: 26. Type locality: Sepik River, New Guinea.

Three specimens, 3 50.1156, 1158, 9 1157, Arau district, Kratke Mts., NE. New Guinea.

#### Otomops secundus sp.n.\*

Type locality: Tapu, Upper Ramu River Plateau, NE. New Guinea.

Type: Adult & 50.982, collector's No. 568 [in spirit].

Paratypes: 50. 979, collector's No. 565, 980, collector's No. 566, 981, collector's No. 567. All in spirit (skulls extracted).

Since the recent (1948) discovery of the remarkable genus Otomops in New Guinea (O. papuensis Lawrence, type locality Vailala River, western Papua) these are the first additional specimens to be collected. While they are no doubt closely related to O. papuensis, their considerably longer forearm and well-marked pale mantle make it necessary to recognize them as distinct.

It is a small Otomops with all the distinctive external and cranial characters of the genus; with forearm 57 (type) and 58 mm. in length (49.2 in the type and only specimen of O. papuensis) and with broad pale buffy-grey mantle as in O. wroughtoni and other species. Colour: dark chocolate-brown on nape and lower back, darkest on lower back. Crown pale brown. Mantle across shoulders well defined, especially anteriorly, and consisting of pale buffy or greyish hairs of which only a few have dark tips. Along the margin of the membranes adjoining the body, above, there is a conspicuous but narrow white line composed of very short pure white hairs sharply outlining the deep chocolate of the body colour.

As in O. papuensis, the premaxillaries are open. Little importance should be attached to this feature, however, since in a series of eleven skulls of O. wroughtoni, type species of the genus, two have the premaxillaries separated, although their union was said by Thomas to be one of the generic characters. In the very deep basisphenoid pits and in the forward extension to the pterygoids of the tympanic bullae, as well as in the extension of the zygomatic plate, this new form presents (as Lawrence remarks of O. papuensis) characters of greater generic value than open or closed premaxillae.

Otomops secundus differs from O. formosus Chasen of Java in much smaller skull, 21.2 (against 24), although the forearm measurements of the two forms are closely approximate (59.7 in O. formosus). Although the forearm in O. secundus is nearly 10 mm. longer than in O. papuensis, the cranial measurements show little difference. The type locality of the new form is little more than 100 miles north of that of O. papuensis, but is separated from it by the central mountain range. It is possible that further collecting in New Guinea and other parts of the Indo-Australasian Archipelago may eventually bring to light intermediate forms and so reduce to

\* The description of this species is by Mr. R. W. Hayman.

subspecific rank some of the named species; but until then it seems advisable to separate specifically the present form.

Measurements in mm. (External from spirit specimens: type of O. papuensis in parentheses):

Number	Sex	Head and body	Tail	Hind foot	Hind foot and tibia	Ear	Forearm	Total length skull	Condylo-basal length
50.982 Type 979 980	*00 <del>1</del>	71 (67) 68	37 (30) 38	10 (10·6) 10	23·9 (23·5) 22·0	24 (22·2) 24·3	58 (49•2) 58	21·2 (20·2) 21·0	19·3 19·9
980 981	0 <del>1</del> 0 <del>1</del>	70 68	36 33	10 1Ò	24·9 24·6	24 23	57 58	21·5 21·0	19·8 19·5

Number	Zygomatic breadth	Width braincase	Bulla to top of braincase	Lower jaw	Breadth across canines	$m^{3}-m^{3}$	i-m <sup>3</sup>	c-m <sup>3</sup>	<i>c-m</i> <sub>3</sub>
50.982 Type	11.2	10.9 (9.5)	9.9 (9.9)	13.1	4.5	8·0	8.6 (8.5)	7.5	8.0 (7.7)
979	11.1	11.3	9.9	14.0	4.2	8∙0	8.7	7.6	8.1
979 980	11.0	11.0	9.9	14.0	4.4	8·0	8.7	7.8	8.2
981		10.0	10.1	13.7	4.4	8.0	8.7	7.8	8.0

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#### APPENDIX I

# LIST OF LOCALITIES FROM WHICH SPECIMENS WERE OBTAINED

#### North-East New Guinea

Apimuri (Buntibasa district), Kratke Mts., 4,500 ft. Arau district, Kratke Mts., 4,000-5,500 ft. Baiyanka, Purari-Ramu Divide, SE. Bismarck Range, 7,500-8,500 ft. Baiyer River, nr. Yanka, east slopes Hagen Range, Central Highlands, 8,000 ft. Binemarian, Kratke Mts., 4,000-5,000 ft. Bogo, 50 miles east of Hagen Government Station, south slopes Bismarck Range, 6,000 ft. Bubu River district (Upper Waria River), 5,000-8,000 ft. Buntibasa district, Kratke Mts., 4,000-5,500 ft. Degabaga, 8 miles east of Hagen Range, 25 miles north of Hagen Govt. Station, Sepik-Wahgi Divide, Central Highlands, 4,500-6,000 ft. Garaina, Upper Waria River, 2,500-3,000 ft. Guyebi, northern slopes Mt. Wilhelm, Bismarck Range, 6,000-7,000 ft. Herowagi (42 miles east of Hagen Govt. Station), south slopes Bismarck Range, 7,000 ft. High slopes Mt. Wilhelm, Bismarck Range, 9,000-10,000 ft. Junzaing, Saruwaged Range, Huon Peninsula, 6,000 ft. Kambaidam (Buntibasa district), Kratke Mts., 4,000 ft. Kuraka (Buntibasa district), Kratke Mts., 4,000-5,000 ft. Menebe, 8 miles east of Hagen Range, 20 miles north of Hagen Govt. Station, Sepik-Wahgi Divide, Central Highlands, 4,500-5,500 ft. Mendi, northern slopes Mt. Wilhelm, Bismarck Range, 4,500 ft. Saiko, Bubu River (Upper Waria River), 5,000-7,000 ft. Sasara (Buntibasa district), Kratke Mts., 4,500-5,500 ft South and north side Bubu River (Upper Waria River), 6,000-7,000 ft. Tapu, Upper Ramu River Plateau, 6,000 ft. Tomba, south-west slopes Hagen Range, Central Highlands, 8,000-9,500 ft. Yampara (Buntibasa district), Kratke Mts., 4,700 ft. Yandara, northern slopes Mt. Wilhelm, Bismarck Range, 5,500-10,000 ft. Yanka, eastern slopes Hagen Range, Central Highlands, 5,000-8,000 ft. Zageheme, Cromwell Mts., Huon Peninsula. Eastern Papua, South-East New Guinea

- Bibitau, Mt. Orian (30 miles NW. Mt. Simpson), Main Range, 2,500 ft. (Boneno Camp), Mt. Maneao (35 miles NW. Mt. Simpson), Main Range, 6,000 ft.
- Boneno, Mt. Mura (30 miles NW. Mt. Simpson), c. 4,000-7,000 ft.
- Enaena, NE. slopes Mt. Simpson, 1,000-6,500 ft.
- Ikara, NE. slopes Mt. Simpson, 3,500-5,000 ft.
- Maneao Range (35 miles NE. Mt. Simpson), 7,000 ft.
- Mt. Mura (30 miles NW. Mt. Simpson), Main Range, 5,000 ft.
- Wapona, north slopes Maneao Range (35 miles NW. Mt. Simpson), 1,000 ft.

# Other Localities

Faralulu district, West Fergusson Island, SE. New Guinea, 600 ft. Taibutu district, West Fergusson Island, SE. New Guinea, 900-1,100 ft. Mountains above Taibutu village, West Fergusson Island, SE. New Guinea, 2,000-3,000 ft. Lau, Bainings Mts., Gazelle Peninsula, New Britain, 1,300 ft. (Rattus exulans browni only.) Mountains SE. New Guinea, behind island of Samaria. Tongoa Island, New Hebrides, 400 ft. (Rattus exulans exulans only.)

#### APPENDIX II

# FORMS DESCRIBED AS NEW IN THIS PAPER

Zaglossus bubuensis Dactylopsila tatei Pseudocheirus (Pseudochirops) corinnae fuscus Peroryctes longicauda magna Peroryctes papuensis Murexia longicaudata parva Antechinus hageni Pogonomys fergussoniensis Pogonomys shawmayeri Rattus ruber fergussoniensis Rattus verecundus tomba Neohydromys fuscus (new genus) Otomops secundus

# APPENDIX III

#### Dendrolagus dorianus notatus Matschie

Dendrolagus notatus Matschie, 1916, Mitt. zool. Mus. Berlin, 8: 294.

Type locality: Slopes of the Schrader Mountains, between 5° S. and 144° E., NE. New Guinea.

Two specimens, a young adult ♂ 50.1815 and a juv. ♀ 1816 from Yanka, eastern slopes Hagen Range, 8,000 ft.

These specimens were collected about 30 miles away from the type locality and appear to be the first to be recorded since the type was described from a single specimen.

*Measurements* in mm. (taken in the flesh):

Number	Sex	Head and body	Tail	Hind foot	Ear	Basal l ngth	Zyg matic breidth	Nasals	m1-3	p4	m <sup>1</sup>	\$11 <sup>2</sup>	811 <sup>3</sup>	yut
50.1815	8	610	470	108	50	165.5	66.2	41.8×21.0	13.8	10.6×6.0	7.0×6.1	7.0×6.6	6·8×6·6	6·5 × 6·3



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